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ABSTRACT

This report completes the series of "Healthy People 2000 Reviews" published to monitor and evaluate U.S. progress toward year 2000 targets. It examines Healthy People 2000 goals (to increase the span of healthy life, reduce health disparities, and achieve access to preventive services); discusses health indicators and priority data needs; and examines sentinel objectives (national and state data). It also highlights progress in the 22 priority areas. For each area, there is a progress quotient chart, a discussion of objectives addressing the area's specific public health significance, data highlights, progress toward the objectives, major results, transition to Healthy People 2010, and data issues. Each area also includes a summary data table and the full text of the objectives. Overall, 68 of the 319 main objectives met the year 2000 targets, and another 129 showed movement toward the targets. Data for 35 objectives showed mixed results, and 7 showed no change. The status of 32 objectives could not be assessed. Many targets were revised during the midcourse review process, generally to make the target more challenging. Technical notes and tables comprise the appendix. (Chapters contain references.) (SM)

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ED 459 289

HEALTHY PEOPLE 2000

National Health Promotion and Disease Prevention Objectives

Healthy People 2000 Final Review

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
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ERRATA

HEALTHY PEOPLE 2000

National Health Promotion and Disease Prevention Objectives

Healthy People 2000 Final Review

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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Please replace the following pages in *Healthy People 2000 Final Review*.

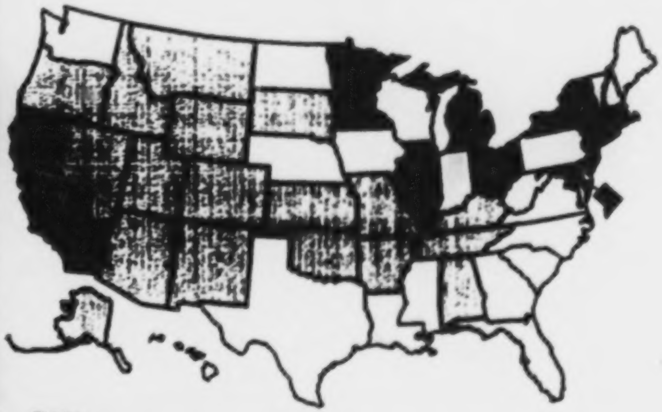
Pages 40–41, 44–45, 48–49, and 52–53.
Table 9 pages 160–164.
Table 19 pages 272–276.

Pages 40–41, 44–45, 48–49, and 52–53 have been replaced because as originally printed the colors for the maps were reversed.

Figure AA. Objective 6.1–Age-adjusted death rates for suicide: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (10.5)
	1997	1998	
United States	10.6	10.4	
Alabama	10.7	12.0	▨
Alaska	21.3	22.1	▨
Arizona	15.7	16.0	▨
Arkansas	13.4	13.1	▨
California	9.9	9.6	■
Colorado	14.9	14.2	▨
Connecticut	7.1	7.2	■
Delaware	10.8	8.0	
District of Columbia	7.0	7.3	■
Florida	12.4	12.6	▨
Georgia	11.2	10.0	
Hawaii	11.0	9.2	
Idaho	16.8	15.2	▨
Illinois	7.1	8.1	■
Indiana	11.8	11.1	
Iowa	11.6	10.7	
Kansas	11.7	11.9	▨
Kentucky	11.3	11.8	▨
Louisiana	11.6	10.4	
Maine	10.1	14.5	▨
Maryland	9.3	8.9	■
Massachusetts	7.4	7.5	■
Michigan	9.5	9.1	■
Minnesota	9.4	9.4	■
Mississippi	11.7	11.5	
Missouri	12.1	12.1	▨
Montana	19.7	16.3	▨
Nebraska	10.0	11.6	
Nevada	22.0	21.2	▨
New Hampshire	10.6	12.7	▨
New Jersey	6.6	6.4	■
New Mexico	17.2	16.4	▨
New York	7.1	6.9	■
North Carolina	11.5	10.4	
North Dakota	12.3	10.6	
Ohio	9.3	9.0	■
Oklahoma	14.3	13.1	▨
Oregon	14.7	14.8	▨
Pennsylvania	10.8	10.4	
Rhode Island	7.1	8.1	■
South Carolina	10.7	10.7	
South Dakota	16.6	15.4	▨
Tennessee	12.4	12.6	▨
Texas	10.7	10.3	
Utah	15.0	16.6	▨
Vermont	10.9	12.9	▨
Virginia	10.4	11.0	
Washington	12.1	11.4	
West Virginia	12.8	11.5	
Wisconsin	10.3	10.7	
Wyoming	18.4	16.8	

United States – The age-adjusted suicide death rate for the United States was 11.7 per 100,000 population at baseline in 1987. In 1998 the rate (10.4) was lower than the target for the year 2000 (10.5). The United States, therefore, attained the target for objective 6.1.



States

■ 12	Twelve States attained the target in both 1997 and 1998.
☐ 7	Seven States attained the target in 1998 but not in 1997.
☐ 10	In 1998, 10 States had rates greater than the year 2000 target (10.5) and less than the 1987 baseline (11.7).
▨ 22	In 1998, 22 States had age-adjusted suicide death rates greater than 11.7, the baseline rate for the United States in 1987.

SOURCE: CDC, NCHS, National Vital Statistics System.

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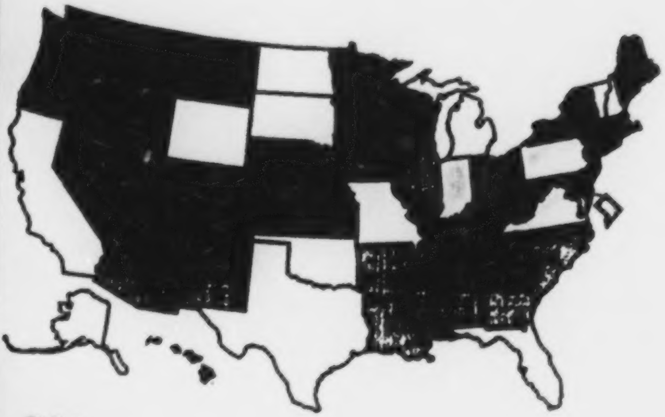
Figure BB. Objective 7.1–Age-adjusted death rates for homicide: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (7.2)
	1997	1998	
United States	7.8	7.1	□
Alabama	12.2	10.8	■
Alaska	8.6	7.8	□
Arizona	9.8	10.0	■
Arkansas	11.9	9.7	■
California	9.3	7.7	□
Colorado	4.6	5.1	■
Connecticut	4.6	5.0	■
Delaware	4.6	3.9	■
District of Columbia	61.5	44.6	■
Florida	8.4	7.9	□
Georgia	8.7	8.9	■
Hawaii	4.1	2.2	■
Idaho	3.5	2.7	■
Illinois	10.8	10.3	■
Indiana	7.7	7.2	□
Iowa	2.5	2.4	■
Kansas	6.5	6.5	■
Kentucky	6.8	6.4	■
Louisiana	17.0	14.4	■
Maine	2.1	2.3	■
Maryland	11.9	12.3	■
Massachusetts	2.5	2.3	■
Michigan	8.5	8.4	□
Minnesota	3.0	2.7	■
Mississippi	14.6	13.1	■
Missouri	8.4	8.4	□
Montana	4.6	3.2	■
Nebraska	3.9	3.6	■
Nevada	10.7	10.3	■
New Hampshire	2.2	*	□
New Jersey	5.1	4.4	■
New Mexico	9.7	9.9	■
New York	6.8	5.8	■
North Carolina	9.3	9.3	■
North Dakota	*	*	□
Ohio	4.6	4.2	■
Oklahoma	9.1	6.7	□
Oregon	4.2	4.4	■
Pennsylvania	7.4	6.0	□
Rhode Island	3.1	2.6	■
South Carolina	9.5	9.2	■
South Dakota	3.2	*	□
Tennessee	10.7	9.5	■
Texas	7.7	7.4	□
Utah	2.9	2.9	■
Vermont	*	*	□
Virginia	7.8	6.5	□
Washington	4.8	4.3	■
West Virginia	5.5	4.9	■
Wisconsin	4.3	3.9	■
Wyoming	4.7	*	□

*Figure does not meet standards of reliability or precision.

United States – At baseline in 1987 the age-adjusted homicide death rate was 8.5 per 100,000. The age-adjusted homicide rate for the United States was 7.8 in 1997 and 7.1 in 1998. The target (7.2) was, therefore, attained for the first time in 1998.



States

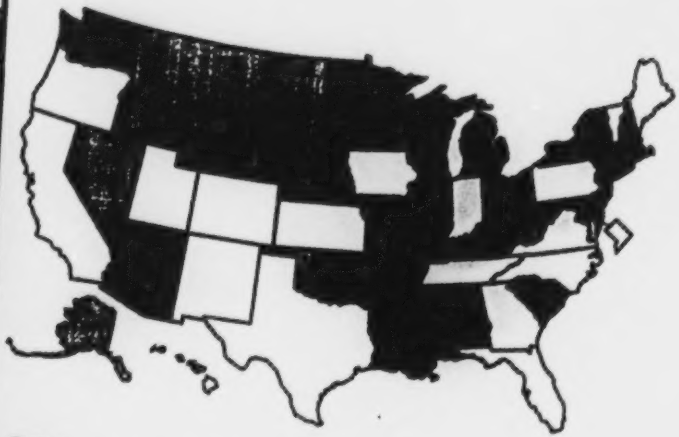
■ 22	Twenty-two States attained the target in both 1997 and 1998.
□ 4	Four States attained the target in 1998 but not in 1997.
□ 6	In 1998, six States had rates greater than 7.2 (the year 2000 target) and less than the 1987 baseline (8.5).
▨ 14	Fourteen States had rates greater than 8.5, the baseline rate for the United States in 1987.
□ 5	Homicide rates were based on too few cases to be considered reliable for these States in 1998.

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure EE. Objective 10.1–Work-related injury death rates: United States and each State, 1998 and 1999

	Death rate per 100,000 workers[1]		Target status
	1998	1999	(4.0)
United States	4.5	4.5	
Alabama	6.5	6.0	▨
Alaska	14.4	14.2	▨
Arizona	3.4	3.1	■
Arkansas	7.5	6.5	▨
California	4.1	3.8	□
Colorado	3.6	4.5	□
Connecticut	3.5	2.3	■
Delaware	2.9	3.7	■
District of Columbia	5.3	5.3	□
Florida	5.5	4.9	□
Georgia	5.3	5.8	□
Hawaii	2.2	5.7	□
Idaho	8.2	6.9	▨
Illinois	3.6	3.4	■
Indiana	5.2	5.7	□
Iowa	4.5	5.2	□
Kansas	7.2	5.8	□
Kentucky	6.4	6.4	▨
Louisiana	8.2	7.2	▨
Maine	4.2	5.0	□
Maryland	3.0	3.1	■
Massachusetts	1.4	2.6	■
Michigan	3.7	3.7	■
Minnesota	3.4	2.7	■
Mississippi	9.4	10.6	■
Missouri	5.3	6.0	■
Montana	13.2	10.9	■
Nebraska	6.3	7.3	■
Nevada	6.8	6.3	■
New Hampshire	3.6	2.2	■
New Jersey	2.6	2.6	■
New Mexico	6.2	5.1	□
New York	2.9	2.9	■
North Carolina	6.2	5.9	□
North Dakota	7.2	6.8	■
Ohio	3.4	4.0	■
Oklahoma	4.9	6.2	■
Oregon	4.3	4.2	□
Pennsylvania	4.2	3.9	□
Rhode Island	2.5	2.3	■
South Carolina	5.9	7.4	■
South Dakota	7.3	11.6	■
Tennessee	5.7	5.7	□
Texas	5.4	4.8	□
Utah	6.6	5.2	□
Vermont	5.0	4.3	□
Virginia	5.2	4.5	□
Washington	3.9	3.0	■
West Virginia	7.7	7.5	▨
Wisconsin	3.4	3.7	■
Wyoming	13.5	12.8	▨

United States –The baseline for the work-related injury death rate was 6.0 for 1983–87. The rate was 4.5 in both 1998 and 1999. Seventy-five percent of the targeted change for the year 2000 had, therefore, been achieved.



States

■ 15 Fifteen States attained the target in two consecutive years, 1998 and 1999.

□ 2 Two States attained the target only in 1999.

□ 17 Seventeen States had rates in 1999 greater than the target and less than the baseline (6.0).

▨ 17 In 1999, 17 States had rates greater than or equal to the baseline for the United States in 1983–87 (6.0).

SOURCE: Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

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[1] The rates for the United States were calculated based on denominators that were adjusted to include military personnel. The rates for States were calculated without any adjustment for military personnel. The rates for States are, therefore, overestimates and comparisons among States may be affected by differences in the proportion of military personnel.

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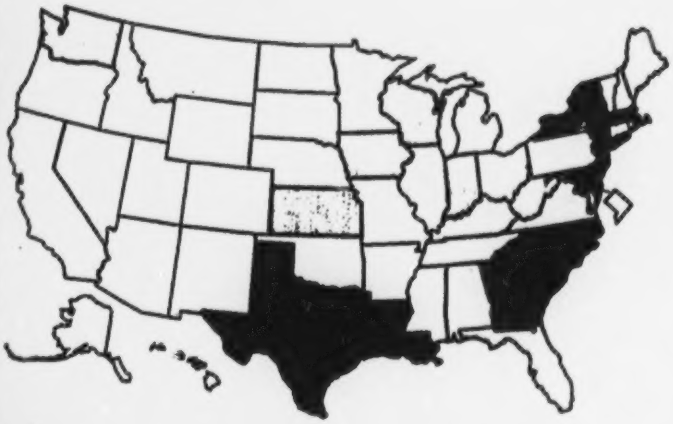
Figure FF. Objective 10.2--Nonfatal work-related injuries per 100 full-time workers in private industry: United States and reporting States, 1997 and 1998

	Nonfatal injury rate per 100 full-time workers		Target status (6.0)
	1997	1998	
United States	6.6	6.2	
Alabama	7.5	6.9	
Alaska	7.9	7.2	
Arizona	6.2	5.9	
Arkansas	7.0	6.4	
California	6.2	5.9	
Colorado	—	—	
Connecticut	6.2	6.2	
Delaware	5.3	5.1	■
District of Columbia	—	—	
Florida	6.3	5.7	
Georgia	5.1	5.4	■
Hawaii	6.6	6.3	
Idaho	—	—	
Illinois	—	6.6	
Indiana	8.4	7.8	▨
Iowa	8.5	8.0	▨
Kansas	7.8	7.7	▨
Kentucky	8.5	7.6	
Louisiana	4.7	4.9	■
Maine	7.1	7.8	▨
Maryland	5.0	4.8	■
Massachusetts	5.4	5.5	■
Michigan	8.0	7.5	
Minnesota	6.9	7.0	
Mississippi	—	—	
Missouri	7.1	7.0	
Montana	7.6	7.4	
Nebraska	8.3	7.6	
Nevada	7.7	7.1	
New Hampshire	—	—	
New Jersey	5.7	4.7	■
New Mexico	6.2	6.0	
New York	4.2	4.0	■
North Carolina	5.9	5.7	■
North Dakota	—	—	
Ohio	—	—	
Oklahoma	6.7	7.0	
Oregon	7.2	6.5	
Pennsylvania	—	—	
Rhode Island	7.5	6.5	
South Carolina	5.7	5.5	■
South Dakota	—	—	
Tennessee	7.0	7.0	
Texas	5.2	4.9	■
Utah	7.8	7.2	
Vermont	6.3	6.6	
Virginia	6.1	5.4	
Washington	9.1	8.7	▨
West Virginia	—	7.4	
Wisconsin	9.0	8.5	▨
Wyoming	—	—	

—Data not available.

United States -- The baseline for nonfatal work-related injuries per 100 full-time workers in private industry was 7.7 for 1983-87. In 1998, the comparable rate was 6.2. The United States had achieved 88 percent of the change required to meet the year 2000 target.



States

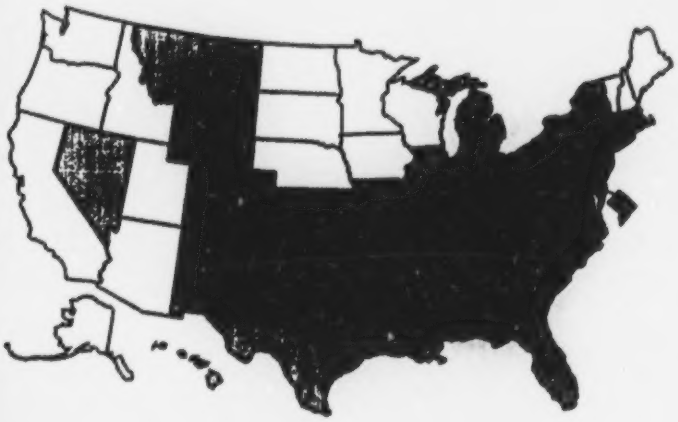
■ 10	Ten States attained the target in both 1997 and 1998.
5	Five States attained the target only in 1998.
20	In 1998, 20 States had rates greater than the year 2000 target (6.0) and less than the 1987 baseline (7.7).
6	In 1998 there were six States with rates greater than or equal to the 1983-87 baseline (7.7).
10	There were no data for 10 States.

SOURCE: Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses.

Figure JJ. Objective 14.5–Percent of live births of low birthweight: United States and each State, 1997 and 1998

	Percent low birthweight		Target status (5.0)
	1997	1998	
United States	7.5	7.6	
Alabama	9.2	9.3	▨
Alaska	5.9	6.0	
Arizona	6.9	6.8	
Arkansas	8.4	8.9	▨
California	6.2	6.2	
Colorado	8.8	8.6	▨
Connecticut	7.3	7.8	▨
Delaware	8.7	8.4	▨
District of Columbia	13.4	13.1	▨
Florida	8.0	8.1	▨
Georgia	8.8	8.5	▨
Hawaii	7.2	7.5	▨
Idaho	6.3	6.0	
Illinois	7.9	8.0	▨
Indiana	7.7	7.9	▨
Iowa	6.4	6.4	
Kansas	6.9	7.0	▨
Kentucky	7.8	8.1	▨
Louisiana	10.2	10.1	▨
Maine	5.9	5.8	
Maryland	8.6	8.7	▨
Massachusetts	7.0	6.9	▨
Michigan	7.7	7.8	▨
Minnesota	5.9	5.8	
Mississippi	10.1	10.1	▨
Missouri	7.7	7.8	▨
Montana	6.3	7.0	▨
Nebraska	7.0	6.5	
Nevada	7.6	7.6	▨
New Hampshire	5.8	5.7	
New Jersey	7.9	8.0	▨
New Mexico	7.8	7.6	▨
New York	7.8	7.6	▨
North Carolina	8.8	8.8	▨
North Dakota	6.2	6.5	
Ohio	7.7	7.7	▨
Oklahoma	7.3	7.2	▨
Oregon	5.5	5.4	
Pennsylvania	7.6	7.6	▨
Rhode Island	7.4	7.6	▨
South Carolina	9.2	9.5	▨
South Dakota	5.5	5.8	
Tennessee	8.8	9.1	▨
Texas	7.3	7.4	▨
Utah	6.6	6.7	
Vermont	6.3	6.5	
Virginia	7.7	7.9	▨
Washington	5.6	5.7	
West Virginia	8.3	8.0	▨
Wisconsin	6.4	6.5	
Wyoming	9.0	8.9	▨

United States – The target for this objective has not been attained. The percent low birthweight was 7.6 in 1998. The percent low birthweight has risen steadily since 1987 when the baseline was 6.9 percent.



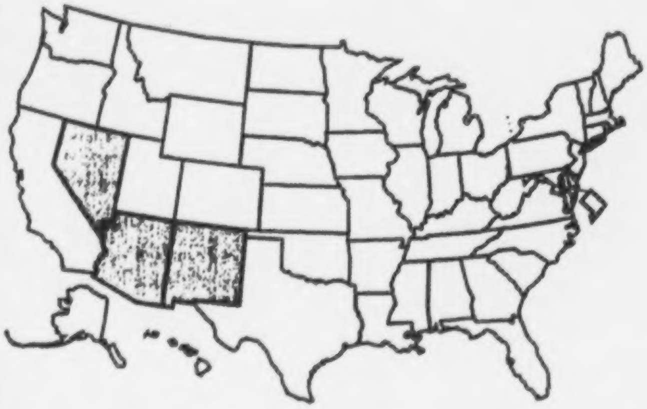
States	
16	In 1998, 16 States had rates greater than the year 2000 target (5.0) and less than the 1987 baseline (6.9).
▨ 35	In 1998, there were 35 States with rates greater than or equal to the 1987 baseline (6.9).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure KK. Objective 14.11–Percent of mothers who began prenatal care in the first trimester: United States and each State, 1997 and 1998

	Percent beginning care in first trimester		Target status (90.0)
	1997	1998	
United States	82.5	82.8	
Alabama	82.2	82.4	
Alaska	80.4	81.4	
Arizona	75.4	75.1	
Arkansas	75.7	77.8	
California	81.8	82.4	
Colorado	82.9	82.2	
Connecticut	89.2	88.0	
Delaware	82.5	83.4	
District of Columbia	66.6	72.0	
Florida	83.9	83.6	
Georgia	85.8	86.4	
Hawaii	83.4	85.4	
Idaho	78.6	78.7	
Illinois	82.4	82.7	
Indiana	80.1	79.9	
Iowa	87.4	87.3	
Kansas	85.6	85.8	
Kentucky	85.8	86.4	
Louisiana	81.3	82.2	
Maine	88.9	88.9	
Maryland	88.8	87.8	
Massachusetts	88.9	89.5	
Michigan	84.2	84.3	
Minnesota	84.1	84.5	
Mississippi	80.1	80.6	
Missouri	86.0	86.1	
Montana	82.6	82.3	
Nebraska	83.9	83.9	
Nevada	76.1	74.6	
New Hampshire	89.6	89.7	
New Jersey	81.3	81.6	
New Mexico	70.2	67.6	
New York	80.6	81.2	
North Carolina	83.9	84.5	
North Dakota	84.8	85.6	
Ohio	85.1	85.5	
Oklahoma	78.5	78.6	
Oregon	81.1	80.2	
Pennsylvania	83.8	84.8	
Rhode Island	89.5	89.7	
South Carolina	80.5	81.4	
South Dakota	82.1	82.7	
Tennessee	83.7	84.1	
Texas	78.5	79.3	
Utah	83.7	82.1	
Vermont	88.0	87.4	
Virginia	85.1	85.2	
Washington	83.3	83.0	
West Virginia	82.0	83.7	
Wisconsin	84.6	84.3	
Wyoming	82.5	81.3	

United States – The United States has achieved about 49 percent of the targeted change in the percent of women beginning prenatal care in the first trimester of pregnancy. The baseline in 1987 was 76 percent.



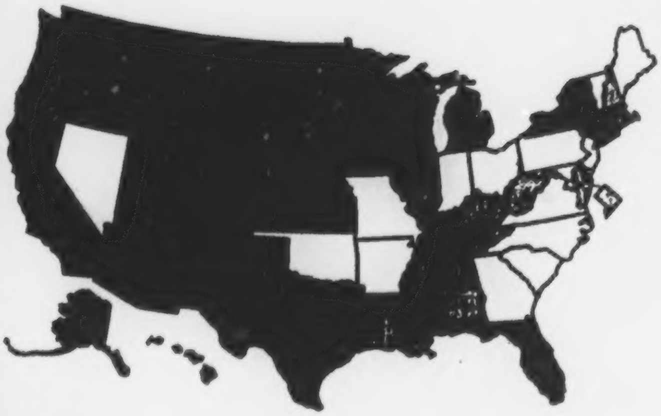
States	
47	In 1998, 47 States had rates between the year 2000 target (90.0) and the 1987 baseline (76.0).
▨ 4	In 1998, there were four States with rates lower than the 1987 baseline (76.0).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure NN. Objective 16.1–Age-adjusted death rates for all cancers: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (130.0)
	1997	1998	
United States	125.4	123.5	■
Alabama	136.0	135.6	■
Alaska	116.4	116.6	■
Arizona	113.1	110.6	■
Arkansas	138.6	133.2	□
California	114.3	110.6	■
Colorado	101.4	101.9	■
Connecticut	120.3	119.1	■
Delaware	141.5	138.9	■
District of Columbia	154.9	154.3	■
Florida	125.6	122.6	■
Georgia	131.8	129.8	□
Hawaii	95.0	100.5	■
Idaho	107.4	110.4	■
Illinois	129.6	128.4	■
Indiana	130.4	133.4	□
Iowa	116.5	117.3	■
Kansas	118.0	112.9	■
Kentucky	145.7	141.9	■
Louisiana	146.4	143.9	■
Maine	135.9	130.8	□
Maryland	133.8	131.3	□
Massachusetts	126.5	126.1	■
Michigan	127.2	124.7	■
Minnesota	115.3	112.6	■
Mississippi	141.1	141.3	■
Missouri	131.1	132.9	□
Montana	114.1	112.2	■
Nebraska	112.4	114.0	■
Nevada	128.5	133.9	□
New Hampshire	134.8	134.3	■
New Jersey	130.2	126.8	□
New Mexico	108.0	104.2	■
New York	122.4	119.7	■
North Carolina	130.6	128.6	□
North Dakota	107.2	113.3	■
Ohio	131.8	131.5	□
Oklahoma	130.2	126.4	□
Oregon	121.2	123.4	■
Pennsylvania	131.4	127.7	□
Rhode Island	136.3	132.0	□
South Carolina	133.4	130.5	□
South Dakota	116.5	116.7	■
Tennessee	139.9	138.9	■
Texas	122.7	120.2	■
Utah	84.6	93.5	■
Vermont	131.4	124.9	□
Virginia	130.2	126.8	□
Washington	117.9	117.8	■
West Virginia	140.3	139.1	■
Wisconsin	119.5	121.3	■
Wyoming	113.5	112.3	■

United States – The age-adjusted death rate for all cancers in 1987 was 134 per 100,000. The rate in 1998 was 123.5. The United States has, therefore, achieved the target of 130 cancer deaths per 100,000.



States

■ 26	Twenty-six States attained the target in 1997 and 1998.
□ 7	Seven States attained the target only in 1998.
□ 9	Nine States had rates between the year 2000 target (130) and the 1987 baseline (134).
▨ [illegible]	Nine States had rates in 1998 higher than the baseline for the United States in 1987 (134).

SOURCE: CDC, NCHS, National Vital Statistics System.

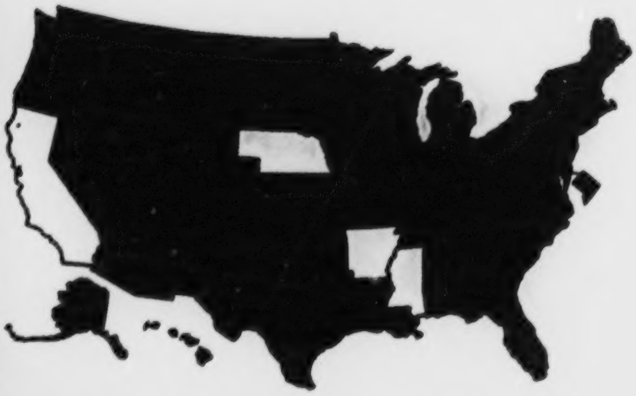
Figure OO. Objective 16.11–Percent of women 50 years of age and older who received a mammogram and breast exam within the last 2 years: United States and each State, 1998 and 1999

	Percent of women 50 years and older		Target status (60.0)
	1998	1999	
United States (NHIS)	64.0	—	□
Median of States (BRFSS)	67.8	68.5	■
Alabama	69.9	65.3	■
Alaska	74.1	73.1	■
Arizona	81.0	76.9	■
Arkansas	57.0	61.1	□
California	69.4	—	□
Colorado	70.1	66.1	■
Connecticut	69.4	77.8	■
Delaware	77.1	77.2	■
District of Columbia	85.2	78.2	■
Florida	68.9	76.1	■
Georgia	64.1	68.2	■
Hawaii	69.7	69.5	■
Idaho	63.5	63.2	■
Illinois	62.1	67.9	■
Indiana	63.9	60.7	■
Iowa	64.0	68.7	■
Kansas	66.3	71.5	■
Kentucky	63.7	68.3	■
Louisiana	63.5	65.0	■
Maine	73.6	80.1	■
Maryland	70.7	75.6	■
Massachusetts	74.6	77.7	■
Michigan	69.8	76.5	■
Minnesota	60.0	69.0	■
Mississippi	60.1	59.3	□
Missouri	66.6	64.9	■
Montana	69.0	66.4	■
Nebraska	59.5	68.9	□
Nevada	62.4	64.7	■
New Hampshire	71.6	80.4	■
New Jersey	65.1	68.0	■
New Mexico	66.3	66.3	■
New York	68.7	71.0	■
North Carolina	74.1	76.9	■
North Dakota	68.3	71.3	■
Ohio	68.1	71.0	■
Oklahoma	62.5	64.7	■
Oregon	67.8	69.3	■
Pennsylvania	66.5	67.9	■
Rhode Island	70.2	74.8	■
South Carolina	66.9	72.6	■
South Dakota	69.5	68.2	■
Tennessee	70.9	67.9	■
Texas	63.0	65.3	■
Utah	61.5	67.7	■
Vermont	67.1	70.0	■
Virginia	68.1	68.0	■
Washington	70.2	67.4	■
West Virginia	68.9	65.7	■
Wisconsin	66.8	68.8	■
Wyoming	60.5	64.1	■

— Data not available.

United States – Based on data from the National Health Interview Survey (NHIS) for 1998, 64 percent of women 50 and older reported that they had a clinical breast exam and a mammogram within the last 2 years. The year 2000 target of 60 percent was, therefore, exceeded. The baseline in 1987 was 25 percent.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of women 50 years of age and older who reported receiving both a mammogram and a clinical breast exam within the last 2 years for the States was 68.5.



States	
■ 47	Based on BRFSS data, 47 States attained the target in both 1998 and 1999.
□ 2	Two States attained the target in 1999 but not in 1998.
□ 1	Mississippi attained the target in 1998 but not in 1999.
□ 1	Data for California were not available in 1999.

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Table 9 pages 160–164. Objective 9.6 rows b-g were omitted from original printed copy.

Table 9. Unintentional injuries objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	9.1	**Unintentional injury deaths** (age adjusted per 100,000)	1987	34.7	32.5	31.0	29.4	30.3	30.3	30.5	30.4	30.1	30.1	---	29.3
		a. American Indian/Alaska Native	1987	66.0	59.0	58.3	57.3	58.1	58.3	56.7	57.6	58.5	55.6	---	53.0
		b. Black male	1987	§68.0	62.4	61.0	56.7	59.8	58.5	57.6	55.7	54.2	54.4	---	51.9
		c. White male	1987	§49.8	46.4	43.9	41.9	42.7	42.7	43.0	42.4	42.0	42.2	---	42.9
		d. Mexican American male[1]	1990	§53.1	...	47.2	46.5	48.6	46.1	44.6	45.4	43.0	44.2	---	43.0
■	9.2	**Unintentional injury hospitalizations** (per 100,000)[2]	1988	§832	780	764	714	699	654	635	612	582	564	---	754
		a. Black male	1991	1,007	...	...	969	893	847	911	730	637	628	---	856
☐	9.3	**Motor vehicle crash deaths**													
		Per 100 million vehicle miles traveled (VMT)	1987	2.4	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
		Per 100,000 population	1987	19.2	17.9	16.5	15.4	15.6	15.6	15.9	15.9	15.7	15.4	15.3	14.2
		a. Children 14 years and under (per 100,000)	1987	6.3	5.3	5.1	4.8	4.9	5.1	4.9	4.8	4.6	4.4	4.2	4.4
		b. People 15–24 years (per 100,000)	1987	36.3	33.4	31.4	28.0	28.5	28.9	29.9	28.9	27.4	26.7	27.2	26.8
		c. People 70 years and over (per 100,000)	1987	22.9	22.9	22.3	21.9	22.9	23.4	23.3	23.3	23.9	23.3	22.4	20
		d. American Indian/Alaska Native (age adjusted per 100,000)	1987	37.7	33.2	33.4	32.0	32.3	31.4	33.1	34.0	32.3	31.8	---	32.0
		e. Motorcyclists (per 100 million VMT)	1987	§42.5	33.8	30.6	25.1	24.7	22.7	22.7	21.8	20.9	22.3	---	25.6
		(per 100,000)	1987	1.7	1.3	1.1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9
		f. Pedestrians (per 100,000)	1987	2.8	2.6	2.3	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.8	2.0
		g. Mexican American (age adjusted per 100,000)[1]	1990	20.9	...	18.9	17.5	18.1	18.7	17.7	18.0	17.0	16.7	---	18.0
☐	9.4	**Fall-related deaths** (age adjusted per 100,000)	1987	2.7	2.7	2.6	2.5	2.5	2.5	2.6	2.7	2.7	2.7	---	2.3
		a. People 65–84 years (per 100,000)	1987	18.1	17.8	18.0	17.6	17.8	18.3	18.5	19.9	20.7	21.5	---	14.4
		b. People 85 years and over (per 100,000)	1987	133.0	143.1	147.5	147.3	149.5	147.0	152.0	159.6	160.3	162.7	---	105.0
		c. Black male 30–69 years (per 100,000)	1987	8.1	6.8	6.2	5.3	5.5	5.4	4.8	5.3	4.5	4.9	---	5.6
		d. American Indian/Alaska Native (age adjusted per 100,000)	1990	3.2	...	3.1	3.1	4.3	3.2	3.8	2.9	4.0	3.5	---	2.8
☐	9.5	**Drowning deaths** (age adjusted per 100,000)	1987	2.1	1.9	1.9	1.6	1.7	1.5	1.7	1.5	1.5	1.6	---	1.3
		a. Children 4 years and under (per 100,000)	1987	§4.3	3.4	3.6	3.2	3.2	2.8	3.7	2.8	2.7	2.9	---	2.3
		b. Male 15–34 years (per 100,000)	1987	4.5	4.0	4.1	3.4	3.6	3.1	4.6	3.0	3.2	3.4	---	2.5
		c. Black male (age adjusted per 100,000)	1987	6.6	5.0	5.8	4.1	4.3	4.0	4.1	3.9	3.5	4.4	---	3.6
		d. American Indian/Alaska Native (age adjusted per 100,000)	1990	4.3	...	3.8	4.0	4.3	4.3	3.5	3.3	3.8	3.0	---	2.0
■	9.6	**Residential fire deaths**													
		Fire-related deaths (age adjusted per 100,000)[3]	1987	§1.7	1.5	1.5	1.4	1.3	1.4	1.2	1.2	1.1	1.0	---	1.2
		a. Children 4 years and under (per 100,000)	1987	§4.5	3.5	3.8	3.4	3.6	3.5	2.6	2.4	2.1	1.8	---	3.3

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		b. People 65 years and over (per 100,000)	1987	[$]4.9	4.1	3.9	3.7	3.7	3.5	3.6	3.8	3.5	3.2	---	3.3
		c. Black male (age adjusted per 100,000)	1987	[$]6.4	5.2	5.1	4.9	4.6	4.5	4.2	3.9	3.4	3.1	---	4.3
		d. Black female (age adjusted per 100,000)	1987	[$]3.3	2.7	2.6	2.3	2.6	2.4	2.4	2.1	2.0	1.6	---	2.6
		e. Residential fire deaths caused by smoking	1987	[$]20%	19%	16%	18%	16%	16%	17%	17%	---	---	---	8%
		f. American Indian/Alaska Native (age adjusted per 100,000)	1990	2.1	...	2.3	2.5	2.5	3.1	3.1	1.9	2.0	1.8	---	1.4
		g. Puerto Rican (age adjusted per 100,000)	1990	[$]1.8	...	1.4	1.4	1.0	1.1	1.3	1.6	1.2	1.0	---	2.0
☐	9.7	**Hip fractures among adults 65 years and over** (per 100,000)	1988	714	776	814	757	841	815	818	934	879	863	---	607
		a. White female 85 years and over	1988	2,721	3,075	3,091	2,368	3,035	2,815	2,604	2,804	2,879	2,690	---	2,177
■	9.8	**Nonfatal poisoning** (per 100,000)	1986	[$]104	68	64	61	52	43	43	41	41	38	33	88
		a. Children 4 years and under (per 100,000)	1986	[$]664	705	638	626	597	518	499	470	460	450	418	520
■	9.9	**Nonfatal head injuries** (per 100,000)	1988	118	110	104	92	90	84	87	79	75	61	---	106
■	9.10	**Nonfatal spinal cord injuries** (per 100,000)	1988	5.3	4.4	6.4	3.6	4.7	3.9	4.6	4.8	4.8	4.5	---	5.0
		a. Male	1988	9.6	6.9	9.8	4.8	6.7	7.1	6.9	6.5	6.1	7.4	---	7.1
☐	9.11	**Incidence of secondary conditions associated with traumatic spinal cord injuries**	...	---	---	---	---	---	---	---	---	---	---	---	20% reduction
☐	9.12	**Motor vehicle occupant protection systems**	1988	42%	49%	59%	62%	66%	67%	68%	68%	69%	69%	67%	85%
		a. Children 4 years and under	1988	48%	50%	55%	---	60%	60%	---	61%	---	92%	---	70%
☐	9.13	**Helmet use by motorcyclists and bicyclists**													
		Motorcyclists	1988	60%	60%	62%	---	---	63%	---	64%	67%	67%	---	80%
		Bicyclists	1988	8%	---	18%	---	---	---	---	---	---	---	---	50%
☐	9.14	**Safety belt and helmet use laws**													
		Number of States with safety belt laws[4]	1989	33	36	41	44	45	48	49	49	49	49	---	50
		Number of States with motorcycle helmet use laws[5]	1989	22	23	24	24	25	25	25	25	22	22	21	50
☐	9.15	**Number of States with handgun design to protect children**	1989	0	0	---	---	---	---	---	---	---	---	---	50
☐	9.16	**Fire suppression sprinkler installation codes** (number of localities)	1989	700	---	---	---	---	---	---	---	---	---	---	2,000
		Proportion of residential fires with suppression equipment	...	---	[6]2.4%	2.5%	2.7%	2.6%	---	---	---	---	---	---	...
☐	9.17	**Smoke detectors**													
		In inhabited residential dwellings	1985	81%	82%	---	---	80%	---	---	---	---	---	---	100%
		At least one on each habitable floor	...	---	---	---	---	52%	---	---	---	---	---	---	100%
		Proportion of people with at least one detector	...	---	[7]68.5%	---	---	87.6%	92.7%	---	---	---	---	---	...
		At least one on each floor	...	---	---	---	---	66%	87%	---	---	---	88%	---	...

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	9.18	**Injury prevention instruction in required course**													
		Proportion of middle/junior and senior high schools	1994	66.2%	...	...	...	...	...	- - -	- - -	- - -	- - -	- - -	50%
☐	9.19*	**Protective equipment in sporting and recreation events**	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	100%
		National Collegiate Athletic Association													
		Football	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		Hockey	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		Lacrosse	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		High school football	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		Amateur boxing	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		Amateur ice hockey	1988	Required	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
		Use of protective headgear and mouth guards among children who play sports													
		Baseball/softball													
		Headgear	...	- - -	- - -	35%	- - -	- - -	- - -	- - -	- - -	- - -	47%	- - -	...
		Mouth guard	...	- - -	- - -	7%	- - -	- - -	- - -	- - -	- - -	- - -	12%	- - -	...
		Football													
		Headgear	...	- - -	- - -	72%	- - -	- - -	- - -	- - -	- - -	- - -	77%	- - -	...
		Mouth guard	...	- - -	- - -	72%	- - -	- - -	- - -	- - -	- - -	- - -	76%	- - -	...
		Soccer													
		Headgear	...	- - -	- - -	4%	- - -	- - -	- - -	- - -	- - -	- - -	9%	- - -	...
		Mouth guard	...	- - -	- - -	7%	- - -	- - -	- - -	- - -	- - -	- - -	14%	- - -	...
☐	9.20	**Number of States with design standards for roadway safety**	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	50
☐	9.21	**Injury prevention counseling by primary care providers**	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	50%
		Percent of clinicians routinely providing service to 81–100% of patients													
		Inquiry about seat belt/child seat use													
		Pediatricians	1992	45%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%
		Nurse practitioners	1992	29%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,10]39%	- - -	50%
		Obstetricians/gynecologists	1992	6%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%
		Internists	1992	11%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%
		Family physicians	1992	16%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%
		Inquiry about hazards for falls in the home (65 years and over)													
		Nurse practitioners	1992	15%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8]14%	- - -	50%
		Internists	1992	10%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%
		Family physicians	1992	7%	...	...	...	- - -	- - -	- - -	- - -	- - -	[8,9]...	- - -	50%

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Advice about seat belt/child seat use													
		Pediatricians	1992	58%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
		Nurse practitioners	1992	32%	...	...	...	---	---	---	---	---	[8,11]30%	---	50%
		Obstetricians/gynecologists	1992	18%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
		Internists	1992	15%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
		Family physicians	1992	29%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
		Advice about prevention of falls in the home (65 years and over)													
		Nurse practitioners	1992	17%	...	...	...	---	---	---	---	---	[8]18%	---	50%
		Internists	1992	17%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
		Family physicians	1992	15%	...	...	...	---	---	---	---	---	[8,9]---	---	50%
■	9.22	**Number of States with linked emergency medical services and trauma systems**	1993	7	...	...	...	...	---	---	---	---	21	---	20
☐	9.23*	**Alcohol-related motor vehicle deaths** (per 100,000)	1987	9.8	8.9	7.9	7.0	6.8	6.4	6.6	6.5	6.1	5.9	5.8	5.5
		a. American Indian/Alaska Native male	1987	40.4	34.3	32.2	31.4	26.8	28.0	---	---	---	---	---	35.0
		b. People 15–24 years	1987	[$]20.9	18.6	17.2	14.2	13.7	13.0	12.8	12.9	11.7	11.7	11.5	12.5
☐	9.24	**Number of States with bicycle helmet laws**	1994	9	...	...	...	...	...	13	14	15	15	---	50
☐	9.25*	**Number of States with firearm storage laws**	1989	[$]1	1	5	8	11	13	15	15	15	15	18	50
☐	9.26	**Number of States with graduated licensing systems**	1993	[$]0	...	...	...	...	---	---	---	11	---	23	35

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[$] Baseline has been revised.

[1] Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.

[2] Data include intentional and unintentional injuries and injuries where the intent was not known.

[3] Includes all deaths due to fires and flames regardless of location.

[4] The District of Columbia, Puerto Rico, and other U.S. possessions also have a safety belt law.

[5] The District of Columbia and Puerto Rico also have a motorcycle helmet law.

[6] 1989 data.

[7] 1985 data.

[8] 1997–98 data.

[9] Response rate for this group was too low to produce reliable estimates.

[10] Data represent the proportion of nurse practitioners who inquired about child safety seat use only. Seventeen percent of the nurse practitioners inquired about seat belt use.

[11] Data represent the proportion of nurse practitioners who provided advice about child safety seat use only. Data on advice on seat-belt use were not available.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	Data source
9.1, 9.1a–d	National Vital Statistics System, CDC, NCHS.
9.2	National Hospital Discharge Survey, CDC, NCHS.
9.3, 9.3a–c, e, f	Fatality Analysis Reporting System, DOT, NHTSA.
9.3d, g	National Vital Statistics System, CDC, NCHS.

Objective number	*Data source*
9.4, 9.4a–d	National Vital Statistics System, CDC, NCHS.
9.5, 9.5a–d	National Vital Statistics System, CDC, NCHS.
9.6, 9.6a–d, f, g	National Vital Statistics System, CDC, NCHS.
9.6e	National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.7, 9.7a	National Hospital Discharge Survey, CDC, NCHS.
9.8, 9.8a	National Electronic Injury Surveillance System, CPSC, Directorate for Epidemiology.
9.9	National Hospital Discharge Survey, CDC, NCHS.
9.10, 9.10a	National Hospital Discharge Survey, CDC, NCHS.
9.12	Baseline and 1989–91 updates: 19 Cities Survey, DOT, NHTSA.
	1992–97 updates: Population Weighted State Surveys, DOT, NHTSA.
	1998–99 updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.12a	Baseline: 19 Cities Survey, DOT, NHTSA.
	1992–93 updates: Population Weighted State Surveys, DOT, NHTSA.
	1994–98 updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.13	Baseline: 19 Cities Survey, DOT, NHTSA.
	Updates: National Occupant Protection Use Survey , DOT, NHTSA.
9.14	DOT, NHTSA.
9.15	Telephone Survey on Handgun Laws, CDC, NCIPC.
9.16	Baseline (localities): Fire Suppression Sprinkler Codes, FEMA, U.S. Fire Administration.
	1990–93 data: National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.17	Baseline and 1990–93 updates: Prevention Index, Rodale Press for inhabited residential dwellings.
	1993 data: Smoke Detector Operability Survey, Consumer Product Safety Commission for inhabited residential dwellings on each habitable floor.
	Proportion of people with smoke detectors: National Health Interview Survey, CDC, NCHS.
	Proportion of people with one on each floor: National Health Interview Survey, CDC, NCHS.
9.18	School Health Policies and Programs Study, CDC, NCCDPHP.
9.19*	1988 baseline: CDC, NCPS; NIH, NIDR.
	1991 data: National Health Interview Survey, CDC, NCHS.
9.21	Baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
9.22	CDC, NCIPC.
9.23*, 9.23b	Fatality Analysis Reporting System, DOT, NHTSA.
9.23a	Fatality Analysis Reporting System, DOT, NHTSA; National Vital Statistics System, CDC, NCHS.
9.24	National SAFEKIDS Campaign.
9.25*	Office of Planning, Evaluation and Legislation, CDC, NCIPC; National Conference of State Legislatures.
9.26	Insurance Institute for Highway Safety.

*Duplicate objective. See full text of objective following this table.

Table 19 pages 272–276. Final status color codes were omitted from the original printed copy.

Table 19. Sexually Transmitted Diseases objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	19.1 **Gonorrhea** (per 100,000)	1989	300	277	247	197	173	166	149	124	123	133	133	100
	a. Black (non-Hispanic)	1989	1,990	1,941	1,714	1,408	1,175	1,163	1,046	817	802	851	849	650
	b. Adolescents 15–19 years	1989	1,123	1,114	1,031	869	728	734	671	544	522	547	534	375
	c. Female 15–44 years	1989	501	495	417	364	309	316	299	259	252	282	283	175
☐	19.2 **Chlamydia prevalence among females 15–24 years**													
	Female 15–19 years	1988	12.2%	---	---	---	---	---	6.7%	5.4%	---	[1]6.9%	6.6%	5%
	Female 20–24 years	1988	8.5%	---	---	---	---	---	4.2%	3.4%	---	[1]4.4%	4.5%	5%
■	19.3 **Primary and secondary syphilis** (per 100,000)	1989	18.1	20.3	17.0	13.3	10.3	7.9	6.3	4.3	3.2	2.6	2.5	4
	a. Black	1989	118	143	122	97	75	57	45	30	22	17	15	30
■	19.4 **Congenital syphilis among infants aged less than 1 year** (per 100,000 live births)	1990	91.0	...	107.3	94.7	80.9	55.8	47.6	32.9	27.7	21.6	14.3	40
	a. Black	1992	[5]415.9	...	...	...	373.2	252.8	213.5	148.8	122.4	90.3	57.9	175
	b. Hispanic	1992	[5]134.6	...	...	...	101.6	73.8	61.6	38.5	33.4	28.7	20.4	50
☐	19.5 **Annual number of first time consultations**[2]													
	Genital herpes	1988	163,000	[3]172,000	235,000	139,000	172,000	142,000	160,000	208,000	176,000	188,000	224,000	138,500
	Genital warts	1988	290,000	[3]275,000	282,000	218,000	167,000	238,000	253,000	191,000	145,000	211,000	240,000	246,500
☐	19.6 **Pelvic inflammatory disease**													
	Hospitalizations per 100,000 females 15–44 years	1988	311	261	233	212	196	177	162	164	157	153	---	100
	Initial visits to physicians (number of visits)[2]	1988	430,800	357,522	376,540	334,793	386,860	312,000	262,000	286,000	261,000	234,000	251,000	290,000
	Hospitalizations per 100,000 females													
	a. Black 15–44 years	1988	655	567	523	539	399	378	296	320	281	266	---	150
	b. Adolescents 15–19 years	1988	342	279	239	205	159	184	141	168	186	158	---	110
■	19.7* **Sexually transmitted Hepatitis B** (number of cases)	1987	47,593	47,811	58,393	52,882	35,849	35,077	29,446	36,794	34,568	32,700	[4]24,527	30,500
☐	19.8 **Repeat gonorrhea infection**	1987	20%	---	---	16.7%	16.1%	13.8%	18.4%	18.5%	17.0%	17.5%	17.2%	15%
	a. Black	1992	21.3%	...	...	...	19.9%	15.6%	20.1%	19.8%	18.3%	18.6%	19.2%	17%
☐	19.9* **Adolescents who ever engaged in sexual intercourse**													
	Adolescents 15 years													
	All females	1988	27%	---	---	---	---	---	22%	---	---	---	---	15%
	In-school females	...	---	35%	36%	---	37%	---	38%	---	44%	---	43%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	---	---	15%
	In-school males	...	---	48%	44%	---	45%	---	42%	---	42%	---	34%	...
	a. All black males	1988	69%	---	---	---	---	---	58%	---	---	---	---	15%
	In-school non-Hispanic black males	...	---	---	79%	---	82%	---	77%	---	75%	---	68%	...
	Adolescents 17 years													
	All females	1988	50%	---	---	---	---	---	51%	---	---	---	---	40%
	In-school females	...	---	62%	66%	---	66%	---	67%	---	62%	---	40%	...

See footnotes and key at end of table.

Table 19. Sexually Transmitted Diseases objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	All males	1988	66%	---	---	---	---	---	53%	---	---	---	---	40%
	In-school males	...	---	73%	68%	---	68%	---	65%	---	60%	---	44%	...
	b. All black males	1988	90%	---	---	---	---	---	79%	---	---	---	---	40%
	In-school non-Hispanic black males	...	---	---	90%	---	92%	---	88%	---	85%	---	82%	...
	c. All black females 15–17 years	1988	66%	---	---	---	---	---	[6]48%	---	---	---	---	40%
	In-school non-Hispanic black females	...	---	---	84%	---	80%	---	75%	---	73%	---	73%	...
☐	19.10 **Condom use at last sexual intercourse**													
	Sexually active unmarried females 15–44 years (by their partners)	1988	19%	---	---	---	---	---	25%	---	---	---	---	50%
	a. Sexually active females 15–19 years (by their partners)	1988	26%	---	---	---	---	---	37%	---	---	---	---	60%
	Sexually active females 15–19 years in grades 9–12 (by their partners)	...	---	40%	38%	---	46%	---	49%	---	51%	---	51%	...
	b. Sexually active males 15–19 years	1988	57%	---	---	---	---	---	---	---	---	---	---	75%
	Sexually active males 15–19 years in grades 9–12	...	---	49%	54%	---	59%	---	61%	---	63%	---	66%	...
	c. Injecting drug users	1992	[6]34%	...	...	...	---	---	---	---	---	---	---	75%
	d. Black females 15–44 years (by their partners)	1988	12.4%	---	---	---	---	---	[6]25%	---	---	---	---	75%
☐	19.11* **Clinic services for HIV and other sexually transmitted diseases**	...	---	---	---	---	---	---	---	---	---	---	---	50%
	Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	---	---	...
	Title X funded family planning clinics													
	STD testing (excluding HIV)	...	---	---	---	---	---	95%	---	---	---	---	---	...
	STD counseling (excluding HIV)	...	---	---	---	---	---	98%	---	---	---	---	---	...
	STD treatment (excluding HIV)	...	---	---	---	---	---	93%	---	---	---	---	---	...
	Gonorrhea													
	Client testing[7]	...	---	97%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	82%	---	---	---	---	---	---	---	---	---	...
	Partner notification[8]	...	---	23%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	60%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	62%	---	---	---	---	---	---	---	---	---	...
	Syphilis													
	Client testing[7]	...	---	86%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	48%	---	---	---	---	---	---	---	---	---	...
	Partner notification[8]	...	---	29%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	57%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	40%	---	---	---	---	---	---	---	---	---	...

See footnotes and key at end of table.

Table 19. Sexually Transmitted Diseases objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Chlamydia													
	Client testing[7]	...	- - -	66%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
	Client treatment	...	- - -	73%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
	Partner notification[8]	...	- - -	15%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
	Partner testing	...	- - -	29%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
	Partner treatment	...	- - -	50%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	...
	HIV													
	Client pretest counseling	...	- - -	66%	- - -	- - -	- - -	82%	- - -	- - -	- - -	- - -	- - -	...
	Client testing	...	- - -	60%	- - -	- - -	- - -	74%	- - -	- - -	- - -	- - -	- - -	...
■	**19.12* HIV and other STD education curricula**													
	Schools offering at least one STD class	1988	95%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	95%
	Proportion of middle and senior high schools:													
	With HIV prevention in required courses	...	- - -	- - -	- - -	- - -	- - -	86%	- - -	- - -	- - -	- - -	- - -	...
	With STD prevention in required courses	...	- - -	- - -	- - -	- - -	- - -	84%	- - -	- - -	- - -	- - -	- - -	...
☐	**19.13 Correct management of sexually transmitted disease cases by primary care providers**	1988	70%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90%
☐	**19.14* Clinician counseling to prevent HIV and other sexually transmitted diseases**	1987	[9]10%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
	Percent of clinicians routinely providing service to 81–100% of patients													
	a. Providers practicing in high incidence areas	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90%
	b. Family physicians	1992	27%	...	...	...	- - -	- - -	- - -	- - -	- - -	[10,11]- - -	- - -	75%
	c. Internists	1992	30%	...	...	...	- - -	- - -	- - -	- - -	- - -	[10,11]- - -	- - -	75%
	d. Nurse practitioners	1992	50%	...	...	...	- - -	- - -	- - -	- - -	- - -	[10]45%	- - -	75%
	e. Obstetricians/gynecologists	1992	46%	...	...	...	- - -	- - -	- - -	- - -	- - -	[10,11]- - -	- - -	75%
	f. Pediatricians	1992	46%	...	...	...	- - -	- - -	- - -	- - -	- - -	[10,11]- - -	- - -	75%
	g. Mental health care providers	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
☐	**19.15 Partner notification of exposure to sexually transmitted diseases**													
	Patients with bacterial sexually transmitted diseases	1988	20%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	50%
☐	**19.16* Adolescent abstinence from sexual intercourse for previous 3 months**													
	All sexually active females 15–17 years	1988	23.6%	- - -	- - -	- - -	- - -	- - -	27%	- - -	- - -	- - -	- - -	40%

See footnotes and key at end of table.

Table 19. Sexually Transmitted Diseases objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		In-school sexually active females 15–17 years	...	---	24%	25%	---	25%	---	23%	---	23%	---	25%	...
		All sexually active males 15–17 years	1988	33%	---	---	---	---	---	37%	---	---	---	---	40%
		In-school sexually active males 15–17 years	...	---	30%	36%	---	33%	---	34%	---	32%	---	32%	...
☐	19.17*	**HIV and STD education for students at colleges and universities**													
		Students 18 years and over given:													
		AIDS or HIV infection prevention information	1995	49.1%	...	...	...	...	...	...	---	---	---	---	90%
		STD prevention information	1995	43.4%	...	...	...	...	...	...	---	---	---	---	90%
		Students 18 years and over taught about AIDS or HIV in a college class	1995	41.4%	...	...	...	...	...	...	---	---	---	---	90%

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[§] Baseline has been revised.

[1] Positivity measure is not adjusted for changes in laboratory test methods and associated increases in the test sensitivity.

[2] As measured by first-time visits to physicians' offices.

[3] 1989 data.

[4] Data are provisional.

[5] Data are for non-Hispanic black females.

[6] Data are for male and female injecting drug users (married and unmarried) who report having vaginal sex within the last 6 months and reported using a condom "always" or "sometimes."

[7] Includes testing at initial visit, at annual visit, or if symptomatic.

[8] By family planning clinic staff via telephone or mail.

[9] Data are for new patients.

[10] 1997–98 data.

[11] Response rate for this group was too low to produce reliable estimates.

NOTES: Data include revisions and, therefore, may differ from data previously published in these reports and other publications. HIV is human immunodeficiency virus. STD is sexually transmitted disease.

Objective number	Data source
19.1, 19a–c	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.2	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.3, 19.3a	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.4	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.5	National Disease and Therapeutic Index, IMS America, Ltd.
19.6, 19.6a–b	For hospitalizations, National Hospital Discharge Survey, CDC, NCHS. For number of visits, National Disease and Therapeutic Index, IMS America, Ltd.
19.7*	Viral Hepatitis Surveillance System, CDC, NCID.
19.8	Gonococcal Isolate Surveillance Project, CDC, NCHSTP.

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Objective number	*Data source*
19.9*	Baseline and updates for all females and all black females: National Survey of Family Growth, CDC, NCHS.
	Baseline and updates for all males and all black males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10*, 19.10d	National Survey of Family Growth, CDC, NCHS.
19.10a	Baseline: National Survey of Family Growth, CDC, NCHS.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10b	Baseline: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school males and females: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10c	National AIDS Demonstration Research Program, NIH, NIDA.
19.11*	Baseline:State Family Planning Directors.
	1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA.
	1994 data: The Urban Institute. Family planning clinics: Current status and recent changes in services, clients, staffing, and income sources. March 1994.
19.12*	Baseline: AIDS education: Public school programs require more student information and teacher training, GAO, 1990.
	1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
19.13	National Disease and Therapeutic Index, IMS America, Ltd.
19.14*	1987 baseline: Sexual history-taking and counseling practices of primary care physicians, Lewis CE and Freeman HE. Western Journal of Medicine, 147: 165–7. 1987.
	1992 baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
19.15	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.16*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS.
	Baseline and update for all males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.17*	National College Health Risk Behavior Survey, CDC, NCCDPHP.

* Duplicate objective. See full text of objective following this table.

HEALTHY
PEOPLE
2000

National Health Promotion and
Disease Prevention Objectives

Healthy People 2000 Final Review

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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Department of Health and Human Services

Tommy G. Thompson
Secretary

Centers for Disease Control and Prevention

Jeffrey P. Koplan, M.D., M.P.H.
Director

National Center for Health Statistics

Edward J. Sondik, Ph.D.
Director

Preface

The *Healthy People 2000 Final Review* is the seventh and last in a series of profiles tracking the year 2000 objectives. This report was compiled by the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC), with considerable input from the Department of Health and Human Service's lead agencies for the year 2000 objectives, the Office of Disease Prevention and Health Promotion and the Office on Minority Health. The *Healthy People 2000* Steering Committee and the National Committee on Vital and Health Statistics served in a review capacity.

The *Healthy People 2000 Review*, which replaced the *Prevention Profiles* that monitored the 1990 national health objectives, continued the series of profiles of the Nation's health objectives as an integral part of the Department's disease prevention and health promotion initiative for the year 2000. This initiative was unveiled in September 1990 by the Secretary of the Department of Health and Human Services with the release of *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. This publication, which incorporates the 1995 midcourse review modifications to the objectives, provides the latest available tracking data for objectives and subobjectives in all priority areas throughout the decade.

Foreword

Since 1990, *Healthy People 2000* has provided the national health promotion agenda that guided Americans toward living longer and healthier lives. *Healthy People 2000* not only identified objectives to improve the Nation's health, but also set measurable targets to monitor progress toward its goals. The ability to quantify and assess progress on health objectives is at the heart of the Healthy People initiative. This *Healthy People 2000 Final Review* completes the series of *Healthy People 2000 Reviews* published to monitor and evaluate the Nation's progress toward the year 2000 targets. As such, it presents the final assessments of our progress in the decade.

Healthy People 2000 was an ambitious effort and invaluable in setting 319 specific objectives for the Nation. In fact, progress was achieved on over 60 percent of the objectives. Some of the major accomplishments include surpassing the target for reducing deaths from coronary heart disease and cancer. The Nation also met its targets for AIDS incidence, primary and secondary syphilis cases, mammography exams, and violent (homicide, suicide, and firearm-related) deaths. The tobacco-related mortality targets were also met. Both infant mortality and the number of children with elevated blood lead levels nearly met their targets as well. The Nation also made progress toward the goal of reducing health disparities for more than one-half of the special population objectives identified to be at increased risk by *Healthy People 2000*. We can all take pride in the fact that the past decade saw substantial improvements in the quality of life for many Americans.

Underlying and contributing to the progress in preventing disease and improving health are the advances in health information. *Healthy People 2000* was a catalyst at all levels of government for the creation and dissemination of quality, comparable health data.

This final edition of the *Healthy People 2000 Review* contains several new data assessments that should prove valuable for many of our constituents. The first is an assessment of the progress toward the second goal of *Healthy People 2000*, reducing health disparities. The assessment is based on data collected for nine special populations that are at increased health risk: four race/ethnicity groups, women, two age groupings, disability, and socioeconomic status. Another is the presentation of data for the 47 "sentinel objectives" developed to represent the scope and magnitude of *Healthy People 2000*. This includes data for each sentinel objective at the national level and State data for those objectives where sources were available. Finally, in addition to data that update the trends shown in previous reports for the 18 Health Status Indicators, this report shows data for the first time for the 16 Priority Data Needs developed at the same time as the Health Status Indicators but which lacked data for assessment below the national level.

Although many gains in health promotion and disease prevention have been made, much remains to be done. For 15 percent of the *Healthy People 2000* objectives, the movement was actually away from the targets. In January 2000, *Healthy People 2010* was released, ushering the Healthy People initiative into the new millennium. The monitoring and assessment goals of *Healthy People 2010* are even more ambitious than those that have directed our efforts over the past decade. For example, the *Healthy People 2000* goal to reduce health disparities has been strengthened in *Healthy People 2010* to focus on eliminating health disparities.

Another important development for the next decade is the publication *Tracking Healthy People 2010*. As a guidebook on the statistics used for Healthy People, it will assist programs at the local, State, and national levels in producing and using the requisite data and, thereby, measurably advance the information base available to enhance the public's health. Thanks to the solid foundation laid by the accomplishments of *Healthy People 2000*, *Healthy People 2010* will be even stronger, as it builds on the experiences of the last decade, identifies our current health opportunities and challenges, and furthers the development of partnerships among public and private organizations to improve the health of the American people.

Edward J. Sondik, Ph.D. Director,
National Center for Health Statistics

Acknowledgments

Overall responsibility for planning and coordinating the content of the *Healthy People 2000 Final Review* rested with the Division of Health Promotion Statistics (DHPS), Office of Analysis, Epidemiology, and Health Promotion (OAEHP), National Center for Health Statistics (NCHS), under the general direction of Diane K. Wagener and Richard J. Klein.

Production coordination was shared among DHPS analysts: John Aberle-Grasse, Elizabeth W. Jackson, Colleen M. Ryan, and Kathleen M. Turczyn.

Production was accomplished by several DHPS working teams, which included John Aberle-Grasse, Manon Boudreault, Lillie Featherstone, Tracy Fenwick, Elizabeth W. Jackson, Kenneth Keppel, Insun Kim, Richard J. Klein, Michael Molla, Jeffrey N. Pearcy, Suzanne E. Proctor, Cheryl V. Willis, Colleen M. Ryan, Thomas C. Socey, Kathleen M. Turczyn, Diane K. Wagener, and Jean F. Williams.

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The priority area chapters were coordinated by DHPS analysts and written by working teams as follows:

Priority Area 1: Carol Macera (CDC) and Christine Spain (OPHS)

Priority Area 2: Carter Blakely (ODPHP), Nancy T. Crane (FDA), and Pamela E Starke-Reed (NIH)

Priority Area 3: Karil Bialostosky (CDC)

Priority Area 4: James Colliver (NIH), Wendy Davis (SAMHSA), Susan Farrell (NIH), Ann Mahony (SAMSHA), Beatrice Rouse (SAMSHA), and Dorita Sewell (SAMHSA)

Priority Area 5: Evelyn Kappeler (OPHS)

Priority Area 6: Michele Edwards (SAMHSA), Doreen Koretz (NIMH), Ann Maney (NIMH), and Dorita Sewell (SAMHSA)

Priority Area 7: Mark Anderson (CDC), Lee Annest (CDC), Alex Crosby (CDC), Martha Highsmith (CDC), Tom Simon (CDC), and Tim Thornton (CDC)

Priority Area 8: Melissa Clarke (HRSA), Catherine Hutsell (CDC), and Brick Lancaster (CDC)

Priority Area 9: Tim Groza (CDC)

Priority Area 10: Bob Castellan (CDC), Dawn Castillo (CDC), Regina Pana-Cryan (CDC), Bill Eschenbacher (CDC), John Franks (CDC), Joe Hurrell (CDC), Lynn Jenkins (CDC), Jay Jones (CDC), Boris Lushniak (CDC), Mark Mendell (CDC), Bob Roscoe (CDC), Lee Sanderson (CDC), John Sestito (CDC), and Rosie Sokas (CDC)

Priority Area 11: David Evans (ATSDR), Paul Garbe (CDC), and John Schelp (NIH)

Priority Area 12: Linda S. Brophy (FDA) and Elisa Elliot (FDA)

Priority Area 13: Alice M. Horowitz (NIH), Candace M. Jones (HRSA), and Stuart Lockwood (CDC)

Priority Area 14: Charlotte Dickinson (CDC), Renee Schwalberg (CDC), Myra Tucker (CDC), and Stella M. Yu (HRSA)

Priority Area 15: Matilde Alvarado (NIH), James Cleeman (NIH), Janet B. Croft (CDC), Karen Donato (NIH), Robinson Fulwood (NIH), Wayne H. Giles (CDC), Kurt Greenlund (CDC), Jeanette Guyton-Krishnan (NIH), Mary M. Hand (NIH), Greg Heath (CDC), Keith Hewitt (NIH), Darwin Labarthe (CDC), Terry Long (NIH), George A. Mensah (CDC), Greg Morosco (NIH), Linda Redman (CDC), Edward J. Roccella (NIH), Nancy Watkins (CDC), and Zhi-Jie Zheng (CDC)

Priority Area 16: Barry Portnoy (NIH) and Karen Richard (CDC)

Priority Area 17: Stephanie Benjamin (CDC), Ben Burton (NIH), Bill Foster (NIH), Linda Geiss (CDC), Ed Tierney (CDC), and Frank Vinicor (CDC)

Priority Area 18: Dave Brownell (CDC), Brenda Garza (CDC), Shelley Gordon (HRSA), Stacie Greby (CDC), Gena Hill (CDC), Joyce Neal (CDC), Ida Onorato (CDC), and Eva Seiler (CDC)

Priority Area 19: Susan C. Clark (CDC), Melinda Flock (CDC), Joel R. Greenspan (CDC), Dana M. Shelton (CDC), and Jack N. Spencer (CDC)

Priority Area 20: Jennifer Brooks (CDC), Sarah Foster (CDC), John Seggerson (CDC), and Nicole Smith (CDC)

Priority Area 21: David Atkins (AHRQ), Melissa Clarke (HRSA), Paul Nannis (HRSA), Kathryn Rickard (AHRQ), and Lyman Van Nostrand (HRSA)

Priority Area 22: Diane Wagener (CDC)

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Introduction

Background

History of the Healthy People Initiative

The Healthy People process began in 1979 with the release of *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* (1), which provided national goals for reducing premature deaths and for preserving independence for older adults. The five primary goals of the 1979 Surgeon General's report were to enhance the health of the U.S. population in five major life stages (infants, children, adolescents and young adults, adults, and older adults). Different focal points were targeted for each age group, such as low birthweight and birth defects for infants, and functional independence, influenza, and pneumonia for older adults. Fifteen priority areas were also identified as keys to achievement of the overall health status goals. In 1980, *Promoting Health/Preventing Disease: Objectives for the Nation* set forth 226 targeted measurable health objectives for the Nation to achieve over 10 years in 15 priority areas (2). This national agenda for health proved its merit when, from 1979 to 1990, the infant mortality rate decreased by nearly 35 percent and the motor vehicle fatality rate for children fell 28 percent. *Promoting Health/Preventing Disease: Objectives for the Nation* served as a model for the development of *Healthy People 2000* (3), which subsequently provided the starting point for *Healthy People 2010* (4).

Life-Stage Objectives

The five major life stages theme has continued through the decades as part of the Healthy People initiative. *Healthy People 2000* included targets for reducing deaths among people under age 65, and for reducing the proportion of people 70 years and over who have difficulty performing two or more activities of daily living. *Healthy People 2000* contained four age-related objectives.

- Reduce the death rate for children by 15 percent to no more than 28 per 100,000 children 1–14 years of age, and for infants by approximately 30 percent to no more than 7 per 1,000 live births.
- Reduce the death rate for adolescents and young adults by 15 percent to no more than 85 per 100,000 people 15–24 years.
- Reduce the death rate for adults by 20 percent to no more than 340 per 100,000 people 25–64 years of age.
- Reduce to no more than 90 per 1,000 people the proportion of all people age 70 years and over who have difficulty in performing two or more personal care activities (a reduction of about 19 percent), thereby preserving independence.

As shown in table A, data for 1998 indicate that the targets for children and adolescents and young adults have been met. The 1998 infant mortality rates of 7.2 per 1,000 live births was very close to meeting the year 2000 target. However, the rate for older adults who had difficulty performing two or more personal care activities (bathing, eating, dressing, using the toilet, or getting in/out of chair/bed) moved away from the target during the *Healthy People 2000* tracking period.

Healthy People 2000

Healthy People 2000: National Health Promotion and Disease Prevention Objectives presented the Nation's health improvement agenda for the last decade of the 20th century (3). Released in 1990, it articulated goals and objectives aimed at significantly improving the health of all Americans by the year 2000.

In developing its own strategy to improve the health of all Americans, *Healthy People 2000* drew on the experiences and knowledge gained during the earlier Healthy People endeavors. The *Healthy People 2000* process was guided by three broad goals: (1) increase the span of healthy life, (2) reduce health disparities, and (3) achieve access to preventive services. To help meet these overarching goals, it identified more than 300 national objectives addressing a broad array of health issues. Forty-seven of these objectives that were representative of the scope and magnitude of *Healthy People 2000* were identified as "sentinel" objectives (see Sentinel Objectives section).

The *Healthy People 2000* objectives, each assigned a specific target, were organized into 22 priority areas. The activities of each priority area were coordinated by at least one agency of the Public Health Service. Addressing special population groups at high risk of poor health, *Healthy People 2000* set specific targets to narrow the gap between the total population and those groups with higher than average rates of death, disease, and disability. In addition, it included priority areas such as HIV infection and cancer that were not included in the 1990 objectives.

Underscoring the vital role of partnerships, *Healthy People 2000* was the product of a cooperative effort among government agencies, businesses, nonprofit organizations, and the scientific community. It was developed in collaboration with 22 work groups of experts, agencies of the Federal government, the National Academy of Sciences' Institute of Medicine, and a consortium of over 375 members representing national voluntary organizations and all the State health departments. Regional and national meetings provided input from a broad cross section of citizens, families, and communities. Moreover, following extensive public review of and comment on a draft document, the *Healthy People 2000* objectives were revised and refined.

Midcourse Modifications

Throughout the 1990s, a series of reports tracked the progress of the Nation in achieving the *Healthy People 2000* objectives. Halfway through the decade, the national commitment to disease prevention and health promotion was reaffirmed during the midcourse review process, which allowed for the modification and addition of objectives.

The midcourse review was a 2-year process, culminating in the publication of the *Healthy People 2000 Midcourse Review and 1995 Revisions* (5) in 1995.

During the midcourse review, work groups of the Public Health Service met to consider new data, new information, and new science that had become available since the release of *Healthy People 2000* in 1990 (3). As a result, 19 new objectives were added to the original 300 unduplicated main objectives, bringing the total number of objectives to 319. Additional data that showed increased health risk or disparity between the total population and people in age, sex, racial, or ethnic minority groups resulted in the addition of 111 new special population subobjectives (bringing the total number of subobjectives to 319). Including the

Table A. Life stage objectives: United States, 1987–98

Objectives	*Baseline 1987*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*2000 Target*
Infant mortality (per 1,000 live births)	10.1	8.9	8.5	8.4	8.0	7.6	7.3	7.2	7.2	7
Children 1–14 years (total deaths per 100,000)	33.7	30.7	28.8	29.8	28.5	27.8	26.5	25.1	24.0	28
Adolescents and young adults 15–24 years (total deaths per 100,000)	97.8	100.1	95.6	98.5	98.0	95.3	89.6	86.2	82.3	85
Adults 25–64 years (total deaths per 100,000)	426.9	400.7	394.7	400.1	398.6	397.3	382.0	368.1	364.0	340
People 70 years and over (difficulty in performing two or more personal care activities per 1,000)	[1]141	- - -	- - -	- - -	- - -	[2]163	- - -	- - -	- - -	90

- - - Data not available.

[1] 1984–85 data.

[2] 1994–95 data

SOURCES: National Vital Statistics System, CDC, NCHS.
For people 65 years and over: National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.

midcourse changes, *Healthy People 2000* contained a total of 638 objectives and subobjectives; because some priority areas share identical objectives, the number of objectives and subobjectives including duplicates is 805. No changes were made to the three broad goals of *Healthy People 2000* or to the organization of the 22 priority areas.

The midcourse review also included 58 target revisions (29 objectives and 29 subobjectives), in almost all cases to make the target more challenging. Text changes were made to 75 existing objectives, in some cases considerably modifying the objective. All midcourse review modifications are detailed in *Healthy People Statistical Note No. 13* (6).

The midcourse modifications established baselines for all *Healthy People 2000* objectives for which data were available. Most of these baselines are the same as those established in the original *Healthy People 2000* report (3); others were changed to reflect revisions to the original baselines or were newly created.

Healthy People 2010

Healthy People 2010: Objectives for Improving Health (4), released in January 2000, carries the Healthy People initiative into the next decade as well as into a new millennium. As the third generation of 10–year goals for the Nation, it builds on initiatives pursued over the past two decades. Central to *Healthy People 2010* are its two broad goals, which challenge the Nation to (1) increase quality and years of healthy life and (2) eliminate health disparities.

Providing a framework to achieve these goals, *Healthy People 2010* identifies 467 specific health promotion and disease prevention objectives in 28 focus areas. Like its predecessors, *Healthy People 2010* is the product of an extensive cooperative national process involving both the public and private sectors, including the Healthy People Consortium, which by the end of the 20th century had grown to include some 350 national organizations and 250 State public health, mental health, substance abuse, and environmental agencies.

To facilitate tracking progress toward the second goal of *Healthy People 2010*—eliminating health disparities—objectives that utilize population-based measures display the baseline status of multiple population groups. The minimum breakout set of groups includes race and ethnicity, gender, and measures of socioeconomic status. However, many objectives include additional population groups such as age, geographic location, health insurance status, disability status, sexual orientation, or people with a specific health status or condition. Of the 396 measures in *Healthy People 2010* that listed population groups, baseline data were available for nearly three quarters of the over 6,000 data items for the minimum set of groups (4).

Leading Health Indicators

Setting itself apart from previous Healthy People efforts, *Healthy People 2010* introduces for the first time a set of 10 Leading Health Indicators (LHIs). Intended to serve as a gauge of the Nation's well-being, the LHIs reflect major public health priorities in the United States at the beginning of the 21st century. They were selected because of their importance as public health issues, their ability to motivate action, and the availability of data to measure their progress. The 10 LHIs are physical activity, overweight and obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunization, and access to health care. Each LHI will be monitored using one or more of the 467 specific objectives, thus serving as a link to the entire *Heathy People 2010* initiative.

Through the LHIs, and through the 467 objectives, *Healthy People 2010* continues an impressive tradition of improving the Nation's health through a comprehensive process of setting goals and measuring results. For more information on *Healthy People 2010*, visit the Web site at http://www.health.gov/healthypeople.

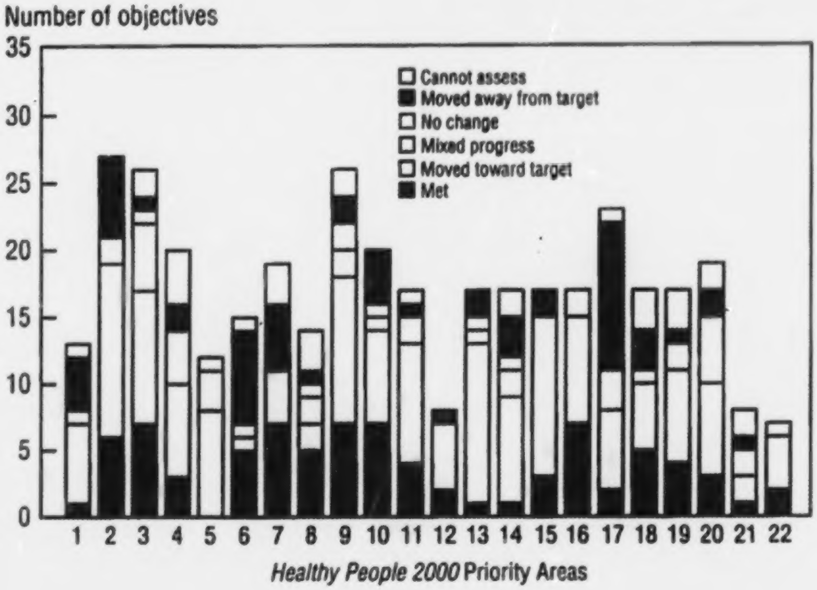
Summary of Progress

Healthy People 2000 identifies 319 unduplicated main objectives. Because some priority areas share identical objectives, certain objectives are presented in more than one priority area, which increases the total number of objectives to 376 including the duplicates. Subobjectives for racial and ethnic minorities and other special populations were established to address increased health risks or disparities compared with the total population. There are 319 subobjectives; with duplicates, there are 429 (5).

Movement of an objective either toward or away from the target was assessed by the direction of the change between the baseline and the most recent data point for the measure(s) used to track the objective. In most cases, only measures with baselines and targets were used for assessment; supplemental data (no baseline or target) were used if measures with baseline and targets were not available. Some of the changes observed were relatively small and may be within what could be expected on the basis of sampling or random variation. For objectives with more than one measure (compound objectives), if data showed movement in different directions, progress was labeled as "mixed." For compound objectives with data not available for all measures, progress was determined by the direction of the measure(s) with data. For example, objective **12.3** is tracked using three measures. However, sufficient tracking data are only available for two of the three measures: Refrigeration of perishable foods and washing cutting boards with soap. Progress for this objective is assessed using these two measures. All measures of a compound objective had to be met for an objective to be considered met; for example, a compound objective with three measures meeting the target and one measure progressing toward the target would be considered moving toward the target (objective **1.10**). A few objectives were very broad in scope and tracking data were not available; in these cases, the subobjectives were used to track progress (for example, objective **17.14**).

The following summary of progress, based on the 319 unduplicated main objectives, presents the final status for the *Healthy People 2000* objectives. The most recent data indicate that 68 objectives (21 percent) met the year 2000 targets and an additional 129 (41 percent) showed movement toward the targets. Data for 35 objectives (11 percent) showed mixed results and 7 (2 percent) showed no change from the baseline. Only 47 objectives (15 percent) showed movement away from the targets. The status of 32 objectives (10 percent) could not be assessed. Among these unassessed objectives, 23 have baseline data but no additional data with which to evaluate progress (several objectives in this category have supplemental data that cannot be used for determination of progress), and 9 objectives lacked baselines (see Priority Area 22). Figure A shows the progress of the objectives by priority area. Progress for each individual objective is shown in the priority area summary tables (tables 1–22).

Figure A. *Healthy People 2000* objectives: Summary of progress by priority area



Area	*Met*	*Moved toward target*	*Mixed progress*	*No change*	*Moved away from target*	*Cannot assess*
1.	1	6	0	1	4	1
2.	6	13	2	0	6	0
3.	7	10	5	1	1	2
4.	3	7	4	0	2	4
5.	0	8	3	0	0	1
6.	5	1	1	0	7	1
7.	7	4	0	0	5	3
8.	5	2	2	1	1	3
9.	7	11	2	2	2	2
10.	7	7	1	1	4	0
11.	4	9	2	0	1	1
12.	2	5	0	0	1	0
13.	1	12	1	1	2	0
14.	1	8	2	1	3	2
15.	3	12	0	0	2	0
16.	7	8	2	0	0	0
17.	2	6	3	0	11	1
18.	5	5	1	0	3	3
19.	4	7	2	0	1	3
20.	3	7	5	0	2	2
21.	1	2	2	0	1	2
22.	2	4	1	0	0	0
Total	83	154	41	8	59	31

A number of *Healthy People 2000* targets were revised during the midcourse review process, in almost all cases to make the target more challenging (see section on Midcourse Modifications). As a result, eight objectives and nine subobjectives that did *not* meet the targets in the final assessment would have met their targets if the original targets had not been revised during the midcourse review.

Organization and Scope of this Review

This *Review* is organized into three major sections and presents the final data collected for the 376 objectives that comprise *Healthy People 2000* (3). While the data for these individual objectives are the basis for this *Review*, the additional analyses presented provide further insight into the Nation's progress in health improvement over the last decade.

The Introduction provides a brief discussion of the history of the Healthy People initiative, the current effort, and the transition to the next decade in *Healthy People 2010* (4). There is also a summary of progress for the past decade and a description of the organization and scope of this *Review*.

The first section presents information that cuts across the 22 *Healthy People 2000* priority areas. The first part of this section summarizes progress regarding the three broad goals set in *Healthy People 2000*: Goal 1—Increase the span of healthy life, Goal 2—Reduce health disparities, and Goal 3—Achieve access to preventive services. The second part of this section presents data for three summary lists: the Health Status Indicators (a set of indicators of community health status relevant to public health practice); the Priority Data Needs (important indicators for evaluating the health of a population but not necessarily available at all levels of government); and the Sentinel Objectives (objectives representative of the scope and magnitude of the changes envisioned by *Healthy People 2000*). Each of these parts provide information through text, charts, and tables describing progress over the last decade by focusing on particular issues that generally address the 22 priority areas.

The second section consists of 22 chapters providing a progress report for each of the *Healthy People 2000* priority areas. Each chapter contains a progress quotient chart, presenting a summary of progress for each objective; a discussion of the objectives that addresses the area's public health significance, data highlights, progress for the objectives, major results, transition to *Healthy People 2010*, and data issues; a summary data table; and the full text of the objectives.

Technical notes and tables comprise the Appendix, the third section. The technical notes present and discuss data and analysis issues involved in monitoring the objectives and subobjectives. The appendix provides additional information that may be useful in understanding and interpreting the data. Additional sources of information on *Healthy People 2000* are also presented.

This report is available on the Internet at http://www.cdc.gov/nchs/.

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Healthy People 2000 Goals

Healthy People 2000 Goals

The purpose of *Healthy People 2000* was to commit the Nation to the attainment of three broad goals. These goals were to increase the span of healthy life, to reduce health disparities among Americans, and to achieve access to preventive services for all Americans. Attaining these broad goals would bring the Nation's health to its full potential.

Goal 1: Increase the Span of Healthy Life

In the 20th century, the population of the United States underwent a continuous period of health improvement that is unparalleled in history. At the turn of the century, the population was characterized by a mostly low standard of living, poor hygiene, poor nutrition, and a high prevalence of communicable and acute diseases typical of a population with high mortality and high fertility. It finished the century with a mostly high standard of living, good hygiene, good nutrition, and health-related habits typical of populations with low mortality and low fertility. In addition, there was a low frequency of communicable diseases and acute conditions that were major causes of most of the premature deaths in the earlier part of the century. As a consequence of the dramatic fall in mortality, the average expectation of life at birth for the total population increased from 47.3 years in 1900 to 76.8 years in 1998 (1), an increase of 62 percent or 3.6 months per year for each of the 98 years.

The same population and health transitions that have jointly propelled the average life expectancy by nearly 30 years, however, are also responsible for ushering an era of new challenges. The population is aging at an unprecedented rate, resulting in an increased prevalence of diseases that are noncommunicable and not always fatal, but degenerative and chronic. This adds a new dimension to measuring the health of the population. Expectation of life, which is a traditional measure of longevity, has now effectively become a "partial" measure of health for an aging population that expects to live a long life with degenerative diseases and chronic conditions.

For an aging population fast approaching the theoretical maximum life span, the fundamental issues involve not only longevity, but quality of life as well. Quality of life (QOL) is a subjective appraisal of life (2), relating to the "goodness" of life as assessed by external conditions (3). It is a multidimensional concept that can, in the broadest sense, include material comfort, work, health, and active recreation (4). The World Health Organization's concept of QOL on the other hand, is based on the assessment of the six broad domains that are related to physical, psychological, environmental, spiritual, level of independence, and social relationship (5). Some of these domains are directly health related and others are not. *Healthy People 2000* is primarily concerned with health-related QOL (6).

The formulation of the concept of health-related QOL began in the 1970s with a limited focus on domains of physical function for measuring activities such as activities of daily living (5). Since then, the concept has been expanded to include other domains, such as general health perception, limitations in usual roles, activity restrictions, symptoms, and cognitive psychological function (7).

The first goal of *Healthy People 2000*, to increase the span of healthy life, is monitored using three statistics. Life expectancy at birth (a measure of longevity), the percent of people reporting that their general health status is fair or poor (a measure of health-related QOL), and expected years of healthy and unhealthy life (a summary measure incorporating both mortality and morbidity, known as years of healthy life or YHL).

Life Expectancy at Birth

The expectation of life at birth is the number of years a newborn would expect to live if that person experienced the mortality schedule existing at the time of birth. This measure is one of the most commonly used measures to summarize mortality and study trends in the span of human life. Figure B presents the life expectancy at birth for the U.S. population by sex and race for the decade monitored by *Healthy People 2000*. Between 1988 and 1998 the expectation of life increased from 74.9 to 76.7 years, an increase of nearly 2 years (2.4 percent). Life expectancy has increased for all four population subgroups shown. The biggest gain, however, was for black males (3.2 years or 5.0 percent), the population subgroup with the lowest life expectancy. Consequently, the difference between the highest (white females) and lowest (black males) life expectancy declined over the decade from 10.5 years to 9.1 years, an indication that the disparity in expectation of life among the subgroups decreased in the 10-year period.

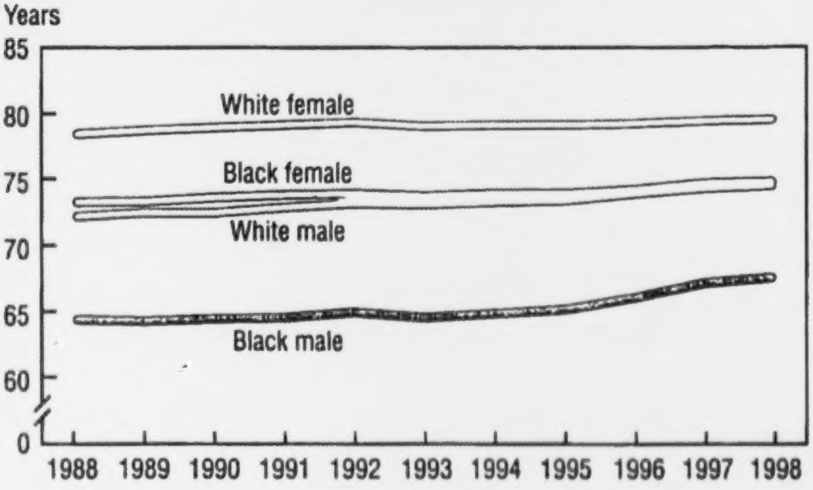
Fair or Poor Health

Between 1990 and 1996, the percent of people reporting fair or poor health increased from 9.9 to 10.4 percent (figure C). Beginning in 1997, there was a change in the methodology used to measure this statistic in the National Health Interview Survey so that data collected in 1997 and subsequent years are not directly comparable to those for 1996 and prior years. Between 1997 and 1998, the percent decreased slightly, from 9.2 to 9.1 percent. Figure C also displays the percent of people reporting fair or poor health by socioeconomic status (SES): poor (family income less than poverty level), near poor (100 to 199 percent of poverty level), and middle/high income (at least 200 percent of poverty level). There is a clear association between poor health and poverty. In 1990, 22 percent of poor people reported fair or poor health, three times that reported by middle or high income people (7 percent). In 1998, the difference was slightly greater (22 percent compared with 6 percent). During the 1997–98 period, the trend in the percent of people reporting fair or poor health increased for the poor population but decreased for the middle or high-income population, widening the disparity.

Healthy and Unhealthy Life

The broad purpose of the 319 *Healthy People 2000* objectives was to improve the health of the population. Consequently, all objectives, at least indirectly, involve increasing the span of healthy life. However, one specific objective (**8.1**, also duplicated as **17.1** and **21.1**), targets a single measure of the span of healthy life. The objective measures health-related quality of life using the summary measure of health known as YHL. This measure estimates the average number of years expected to

Figure B. Life expectancy at birth: United States, 1988–98



	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
White female .	78.9	79.2	79.4	79.6	79.8	79.5	79.6	79.6	79.7	79.9	80.0
Black female. .	73.2	73.3	73.6	73.8	73.9	73.7	73.9	73.9	74.2	74.7	74.8
White male . . .	72.2	72.5	72.7	72.9	73.2	73.1	73.3	73.4	73.9	74.3	74.5
Black male . . .	64.4	64.3	64.5	64.6	65.0	64.6	64.9	65.2	66.1	67.2	67.6

SOURCE: CDC/NCHS, National Vital Statistics System.

be lived in a healthy state for people of a specified population. As a summary measure of population health, this measure incorporates mortality and morbidity into a single statistic (8,9). The mortality component utilizes total mortality, while the morbidity component is evaluated using two measures: respondent-assessed health and activity and functional limitations due to chronic conditions. Individuals are classified into 30 groups according to both measures and these groups are then assigned a quality-of-life score (based on a mathematical model) indicating the quality-of-life for that group relative to a healthy state (10). The YHL is calculated using a life table approach that incorporates the age-specific mortality with the age-specific health related quality-of-life score. The resulting "average years of healthy life" is equivalent to the average years a person would live if he or she lived in a healthy state.

In 1990 the YHL was 64.0 years. By 1998, this increased by 1.2 years to 65.2 years— a rise that was comparable to the increase in expected years of life (1.3 years between 1990 and 1998). Consequently, average YHL as a percent of total expected years of life was largely unchanged. Figure D presents the expected years of healthy life and unhealthy life of the U.S. population by race and ethnicity in 1998. The Hispanic population has the greatest YHL. However, Hispanics also have the smallest proportion of life spent equivalently in healthy states, that is 66.3 years of the total 82.1 expected life years (81 percent). Blacks have the smallest YHL and also a small proportion of life spent in healthy states (81 percent). Among whites, 86 percent of the expected life years are equivalently spent in healthy states.

Goal 2: Reducing Health Disparities

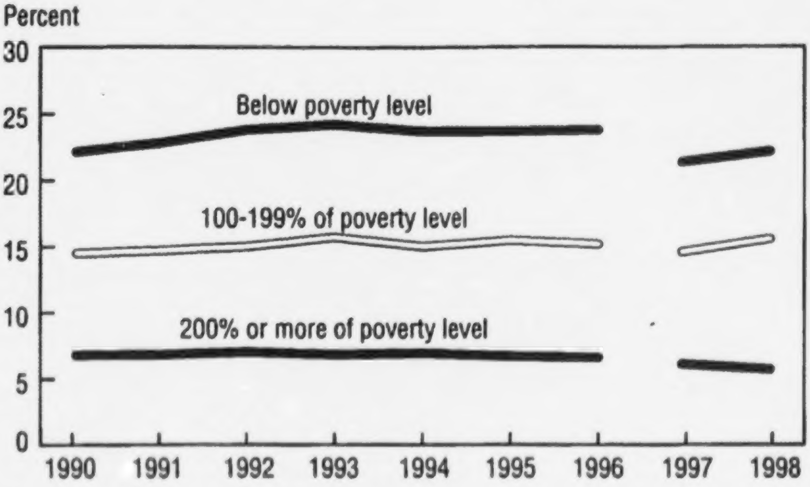
The population of the United States grew by 13 percent over the last decade, and has increased in diversity at an even greater rate (11). The aging of our population is well documented and the trend will continue for at least several decades. Racial and ethnic minority populations are among the fastest growing of all communities in the United States. Yet, these populations in many respects, have poorer health and remain chronically underserved by the health care system. In many cases, the health gaps initially identified in the 1985 *Task Force Report on Black and Minority Health* (12) have grown. Differences in accessibility, utilization, quality of care, or benefits derived from medical care are factors contributing to inequality (13).

Healthy People 2000 included over 200 special population subobjectives to address the overarching goal of reducing health disparities in special populations at higher risk than the total population for death, disease, or disability (14). Targets for these subobjectives were set requiring a greater percent change with the aim of reducing the gap between these special populations and the total population. A few subobjectives were also included where, although the special population was not at increased risk, there was a disparate trend (for example, **16.2b**, lung cancer for women). The populations highlighted in *Healthy People 2000* included American Indian/Alaska Native, Asian or Pacific Islander, black, Hispanic, women, adolescents and young adults, older adults, people with disabilities, and people with low SES.

The *Healthy People 2000 Midcourse Review and 1995 Revisions* resulted in the addition of many subobjectives for these special populations for a total of 49 objectives or subobjectives for American Indian/Alaska Native, 19 for Asian or Pacific Islander, 97 for black, 84 for Hispanic, 187 for women, 243 for adolescents, 173 for older adults, 89 for people with disabilities, and 65 for people with low SES.

The objectives used for the assessment of disparities include the *Healthy People 2000* subobjectives for each of the nine special population groups as well as other objectives related to these groups. A list of the objectives for each group can be found in Appendix table VII. Some objectives have measures for more than one group. Progress toward the target can be measured for all of these objectives; however, not all the objectives can be used to measure disparity. For groups other than the racial/ethnic groups, a

Figure C. Percent of people with fair or poor health: United States, 1990–98



	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
Below poverty level	22.1%	22.8%	23.8%	24.2%	23.7%	23.7%	23.8%	21.4%	22.2%
100–199% of poverty level	14.5%	14.7%	15.0%	15.7%	15.0%	15.5%	15.2%	14.6%	15.6%
200% or more of poverty level	6.8%	6.8%	7.0%	6.8%	6.9%	6.7%	6.6%	6.1%	5.7%

SOURCE: CDC/NCHS, National Health Interview Survey.

NOTE: The survey was redesigned in 1997. Data for 1997 and 1998 may not be directly comparable with those for previous years.

relatively small proportion of the objectives are applicable for assessment of disparity. This is because, for these groups, most objectives target the group directly and do not also target a reference population that could be used to assess disparity status. Disparity was assessed by comparing the percent change between the baseline and last data point for the special population subobjective with the percent change observed for the total population used to track the objective. (See section on Disparity Measurement in the Appendix.)

The 1990s saw significant improvements in the ability to track progress for *Healthy People 2000* objectives by special populations. Leading into the decade, in 1989, Hispanic origin was included for the first time on standard birth and death certificates recommended for use by all States. By the end of the decade, the number of States that publish vital statistics data by race and ethnicity increased from 19 to 27—surpassing the *Healthy People 2000* target. Despite these improvements, data were still missing at the end of the decade to assess progress for 6 percent of the objectives for American Indian/Alaska Native, 5 percent for Asian or Pacific Islander, 2 percent for black, 8 percent for Hispanic, 10 percent for women, 26 percent for adolescents, 10 percent for older adults, 7 percent for people with disabilities, and 6 percent for people with low SES.

At the conclusion of the decade, more than one-half of the special population subobjectives showed a narrowing or elimination of disparities. In addition, progress for special populations was made in a number of areas. However, only 16 percent of the year 2000 targets for the special population subobjectives were met compared with 22 percent of all 318 unduplicated objectives and subobjectives.

One of the two overarching goals for *Healthy People 2010*, launched in January 2000, extends this goal from reducing disparities to actually eliminating health disparities. As a result, *Healthy People 2010* has the same target for all population groups, including racial and ethnic groups. As noted during the public comment period for *Healthy People 2010*, "the ambitious goal of eliminating health disparities demands broader and more interdisciplinary remedies than those previously considered."

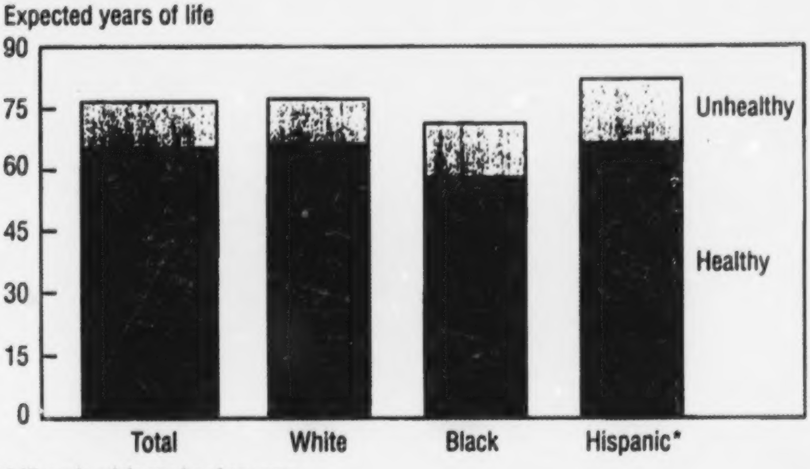
The following sections discuss progress toward reducing disparities and progress toward the year 2000 targets for each of the nine special population groups addressed by *Healthy People 2000*. A summary of progress is graphically shown for each group along with text discussion of some specific examples. The specific examples are shown for illustrative purposes only, and do not infer priority or importance. A complete assessment of progress toward the target and progress toward reducing disparity for the objectives in each of the nine special population groups is shown in Appendix table VII.

Reducing Disparities: American Indian/Alaska Native

Figure E demonstrates progress made in reducing disparities in the health status of American Indians/Alaska Natives. Twenty-four (55 percent) of the forty-four American Indian/Alaska Native subobjectives showed a reduction or elimination of disparities in health status between this population and the total population. Of these 24 objectives, 20 met or moved toward their year 2000 targets.

Hepatitis A (**20.3j**) and bacterial meningitis (**20.7a**) showed remarkable improvement— surpassing year 2000 targets and narrowing the gap. Diabetes prevalence for American Indians and Alaska Natives, however, increased, although the gap narrowed (**17.11a**) because the prevalence for the total population increased at an even greater rate. Diabetes-related deaths (**17.9b**) and end-stage renal disease rates (**17.10b**) increased and the gaps widened.

Figure D. Expected years of healthy and unhealthy life: United States, 1998



* Hispanic origin can be of any race.

	Total	*White*	*Black*	*Hispanic**
Healthy life expectancy	65.2	66.1	57.8	66.3
Unhealthy life expectancy	11.5	11.2	13.5	15.8
Total life expectancy	76.7	77.3	71.3	82.1

*Data are preliminary. Hispanic includes people of any race with Hispanic origin.

SOURCE: CDC/NCHS, National Vital Statistics System and National Health Interview Survey.

Reducing Disparities: Asian or Pacific Islander

Figure F represents the disparity status of the subobjectives for Asians or Pacific Islanders. Twelve of the sixteen subobjectives for this group showed a reduction or elimination of disparities, and all 12 subobjectives either met or moved toward their targets.

For example, the year 2000 target was met and disparity decreased for flu vaccinations among the elderly (**21.2**). Cigarette smoking decreased for Southeast Asian males at the beginning of the decade and the disparity narrowed (**3.4g**). The number of Hepatitis B cases among Asian or Pacific Islander children dramatically decreased (**20.3d**) although disparity was not assessed for this objective because the measure for the subobjective was different from that for the main objective. One objective, new tuberculosis cases (**20.4a**), showed a widening of disparity.

Reducing Disparities: Black or African American

Figure G depicts the status of subobjectives to reduce disparities between black Americans and the total population. Elimination or reduction of disparities occurred for 55 (62 percent) of the 89 subobjectives. Of these 55 subobjectives, 50 either met or moved toward their targets.

Objectives for which targets were met and disparities were reduced included cancer deaths (**2.2a**), firearm-related deaths (**7.3a**), unintentional injuries (**9.2a**), clinical breast examination and mammography (**16.11e**), and syphilis (**19.3a**). Unfortunately, diabetes prevalence (**17.11e**), diabetes-related deaths (**17.9a**), lower extremity amputations (**17.10c**), maternal mortality (**14.3a**) and fetal alcohol syndrome (**14.4b**) increased and the disparity gaps widened.

Reducing Disparities: Hispanic or Latino

Figure H shows the status of the 76 subobjectives for Hispanic persons. Forty (52 percent) of these subobjectives showed a reduction in disparity between Hispanics and the total population. It is interesting to note that 10 of these 40 subobjectives moved away from their targets but at a slower rate than the objectives for total population.

Objectives for which targets were met and disparities were reduced included infant mortality for Puerto Ricans (**14.1c**), use of clinical breast examination and mammography among Hispanic women over 50 years of age (**16.11c**), and rates of congenital syphilis (**19.4b**). Adolescent pregnancy (**5.1b**) and high school completion rates (**8.2a**), however, remained essentially the same.

Reducing Disparities: Women

Figure J depicts progress made in reducing health disparities for women in the United States. Of the 19 objectives for which disparities between women and the total population can be assessed, 9 objectives showed a reduction or elimination of health status inequity. Of these nine objectives, six either met or moved toward their targets.

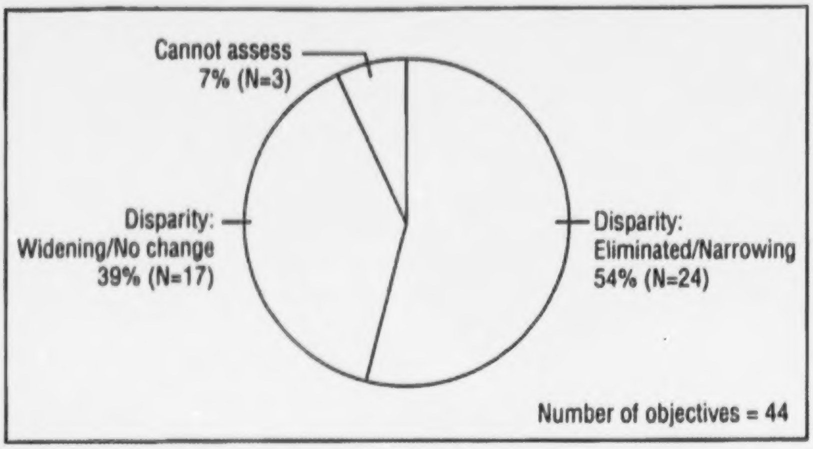
Progress was made in smoking prevalence (**3.4**) and homicide rates among African American women (**7.1e**). Unfortunately, although new cases of AIDS decreased in recent years, the rate of decrease for women (**18.1d**) was less than that for the total population.

Reducing Disparities: Adolescents and Young Adults

The pie chart depicted in figure K reflects changes in disparities between adolescents and young adults and the total population. Disparities in seven subobjectives decreased or were eliminated, while five widened. All seven of the subobjectives that reduced or eliminated the disparity either met or moved toward their targets.

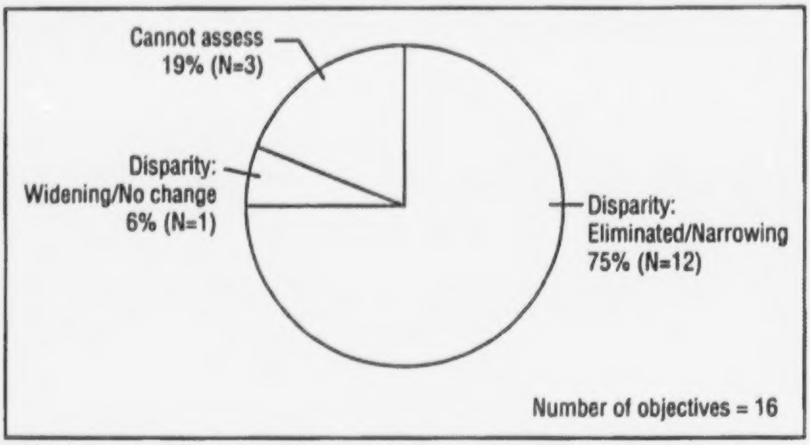
Motor vehicle crash death rates for people 15–24 years (**9.3b**) and drownings for males 15–34 years decreased substantially and the disparities gaps narrowed. However, there were increases in disparities for rape or attempted rape (**7.7a**) and adolescent gonorrhea (**19.1b**).

Figure E. Assessment of disparity for American Indian/Alaska Native objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Figure F. Assessment of disparity for Asian or Pacific Islander objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Reducing Disparities: Older Adults

Figure L depicts progress on subobjectives used to measure disparity between older adults and the total population. Eleven of the nineteen subobjectives measured showed a reduction or elimination in disparity, and all of these either met or moved toward their targets.

There was nearly a 20-percent reduction in the rate of white male suicide in the elderly population (**6.1c**), narrowing the gap with the total population. This reduction is reflected in the increase in years of healthy life for adults 65 years and over (**8.1c**). There were, however, increases in the disparities for death rates due to falls (**9.4a,b**) and motor vehicle crashes (**9.3c**).

Reducing Disparities: People with Disabilities

Figure M shows progress made on the six subobjectives among people with disabilities for which disparity could be measured. The graph indicates that disparities have been reduced or eliminated for one-half of the subobjectives for people with disabilities. One of these subobjectives moved away from its target, although at a slower rate than the total population, thus reducing the disparity.

Data indicate that progress is being made in reducing the percent of overweight persons in the disabled population (**1.2e**). In addition, disparities in sedentary lifestyle between the disabled and the total population are being reduced (**1.5b**).

Reducing Disparities: People with Low Socioeconomic Status

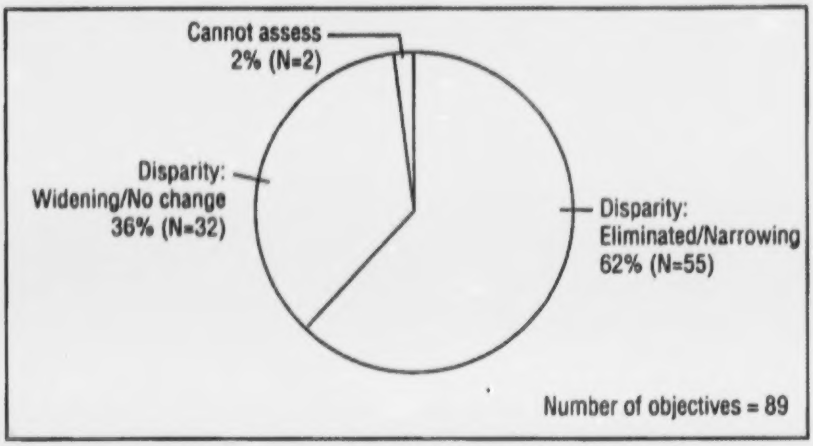
The chart shown in figure N demonstrates the disparity status of the 36 subobjectives used to measure disparities between people with low socioeconomic status (SES) and the total population. While nearly one-third of the subobjectives showed a widening or no change in disparity, 21 (58 percent) improved. But of these 21 subobjectives, 3 moved away from their targets, indicating that the total population moved away from its target at a faster rate than those with low SES.

Encouraging improvements were seen in the areas of breast feeding (**2.11a**) and the use of contraception (**5.12b,c**). Conversely, there were increases in the percent of overweight persons (**1.2a**) and certain oral health issues (for example, prevalence of gingivitis, **13.5a**).

Goal 3: Achieving Access to Preventive Services

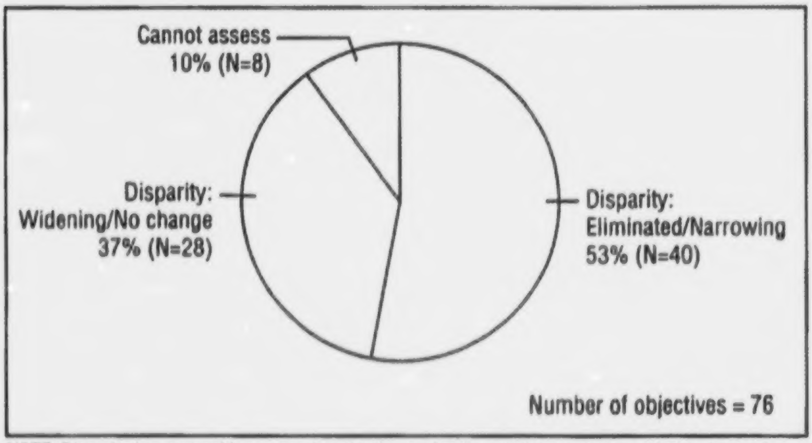
Access to health services—including preventive care, primary care, and tertiary care—often depends on two independent factors: having health insurance and having a regular source of health care (15–18). Uninsured people are less than half as likely as people with health insurance to have a primary care provider; to have received appropriate preventive care, such as recent mammograms or Pap tests; or to have had any recent medical visits. Lack of insurance also affects access to care

Figure G. Assessment of disparity for black or African American objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Figure H. Assessment of disparity for Hispanic or Latino objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

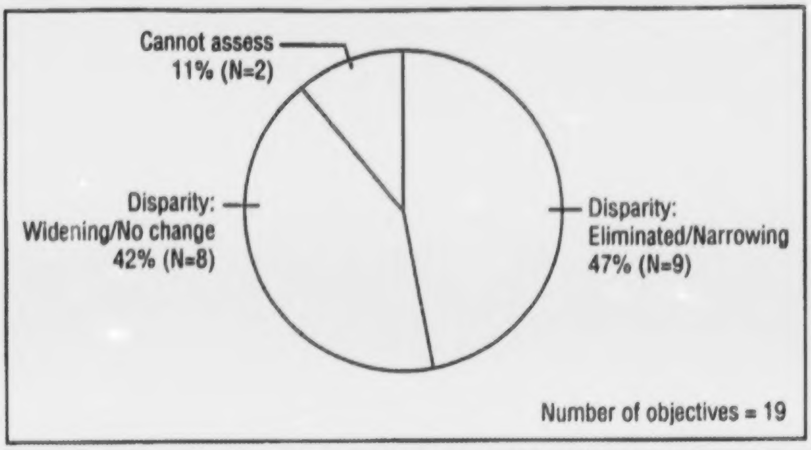
for relatively serious medical conditions. Evidence suggests that lack of insurance over an extended period significantly increases the risk of premature death and that death rates among hospitalized patients without health insurance are significantly higher than those with insurance (19). Another study showed that, among those without insurance, chronically ill persons are even less likely than those with acute conditions to get health care services they need (20). Beyond having health insurance, access depends on the actual benefits offered by the insurance plan. Many plans do not offer adequate benefits for some services such as mental health, eye care, oral health, assistive devices, and drugs. Medicaid expansions that increase the proportion of a State's population eligible for Medicaid lead to increases in enrollment, enhanced utilization of medical services, and lower child death rates (21).

More than 40 million persons in the United States do not have a particular doctor's office, clinic, health center, or other place where they usually go to seek health care or health-related advice. Even among privately insured persons, a significant number lacked a usual source of care or reported difficulty in accessing needed care due to financial constraints or insurance problems (15). Barriers to obtaining health care can be financial, structural, or personal. Financial barriers include not having health insurance, not having enough health insurance to cover needed services, or not having the financial capacity to cover services outside a health plan or insurance program. Structural barriers include the lack of primary care providers, medical specialists, or other allied health care professionals (including personal assistants and caregivers) to meet special needs; the lack of health care facilities or exam equipment; or the lack of transportation. Personal barriers include cultural or spiritual differences, language barriers (including sign language), not knowing what to do or when to seek care, or mistrust or concerns about confidentiality or discrimination.

The 1990s experienced a steady increase in the delivery of certain effective clinical preventive services, including child and adult immunizations, screening for cancer and risk factors for heart disease, and counseling of smokers to quit smoking. For the remaining individual services, a variety of barriers may have prevented most services from achieving the *Healthy People 2000* targets for delivery to the general population. For most services, the lowest delivery rates were observed among specific racial and ethnic groups and people with low income or less education.

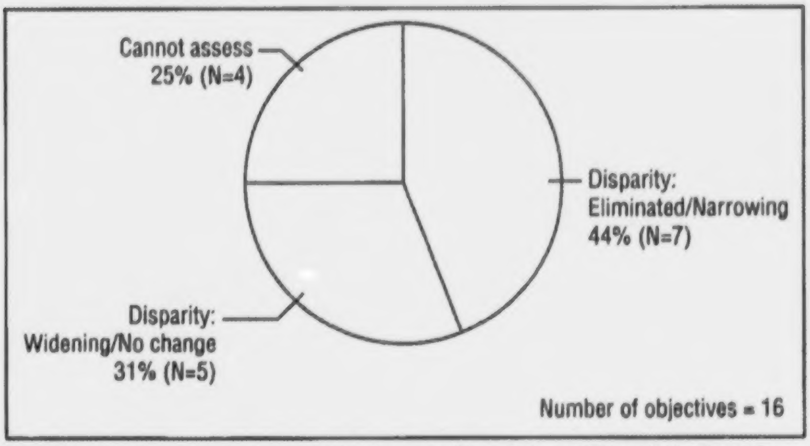
Two factors are consistently associated with a greater likelihood of receiving recommended preventive care: health insurance and a usual source of health care. Costs of preventive care can be an important barrier, especially for persons who may not perceive the benefits of health care when they are not sick. The substantial increase in the coverage of preventive services by insurers and health plans over the past decade has reduced the costs of prevention to individuals with insurance, although deductibles and co-payments may still deter some patients. Having a

Figure J. Assessment of disparity for women objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Figure K. Assessment of disparity for adolescents and young adults objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

usual source of care, however, may be as important as having health insurance. Continuity of care makes it more likely that persons in need of specific preventive services will be identified, that clinician recommendations will be followed, and that patients will return for services that need to be delivered periodically.

Access to care, as measured by having a usual source of health care (**21.3**), increased from 78 percent in 1992 to 85 percent by 1998 for the general population, although Hispanics, American Indians/Alaska Natives, and people below the poverty level lagged behind (72–77 percent). First trimester prenatal care also increased gradually, but much more dramatic gains were seen in the delivery of child immunizations, where the proportion of children who are fully immunized climbed from 55 to 80 percent (figure O).

Little progress, however, was evident in reducing the number of persons under 65 years without health insurance (**21.4**) (figure P). The population over 65 years in the United States is assumed to be covered by Medicare. Although rates of uninsured people declined slightly from the middle of the decade, they were higher for the general population in 1998 (16.6 percent) than in 1989 (15.7 percent). Due to Medicaid coverage of poor families and the State Children's Health Insurance Program (SCHIP), children were less likely to be uninsured than adults. Despite the successes of these programs a substantial proportion (12.7 percent) continue to lack health insurance coverage. Lack of health insurance is , most common in young adults, who are less likely to have employer-based insurance and more likely to decline voluntary coverage.

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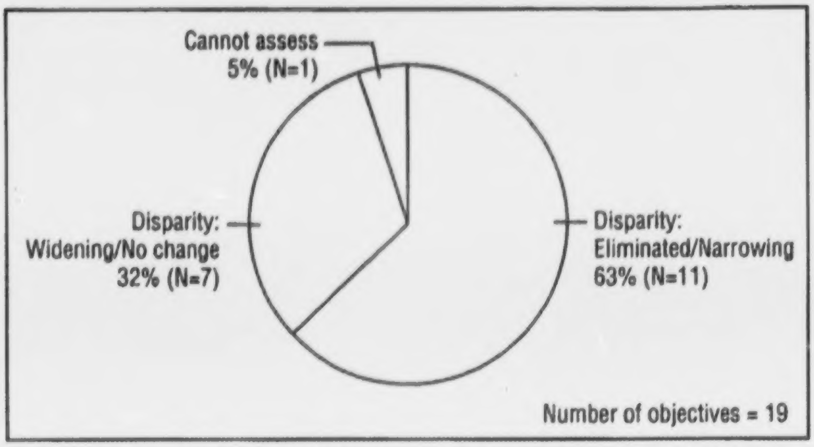
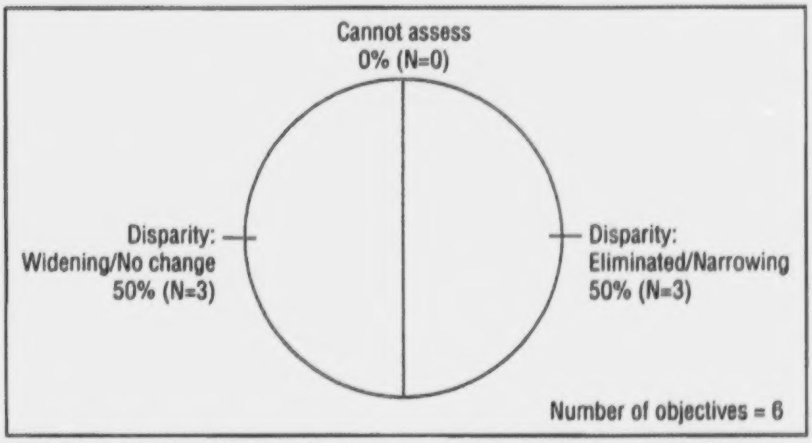
Figure L. Assessment of disparity for older adults objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Figure M. Assessment of disparity for people with disabilities objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

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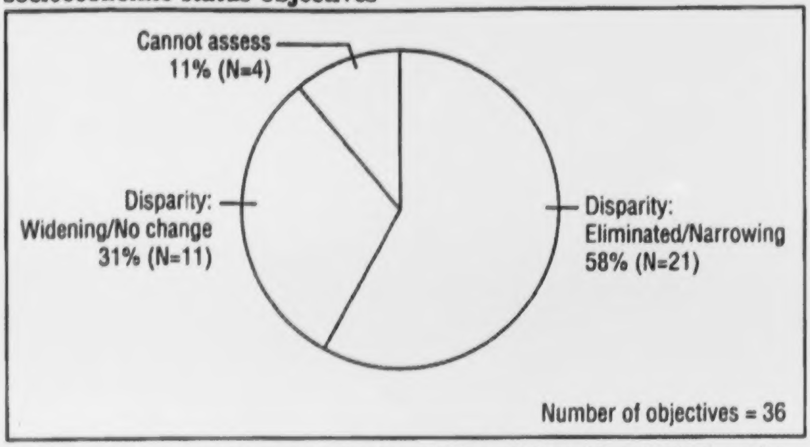
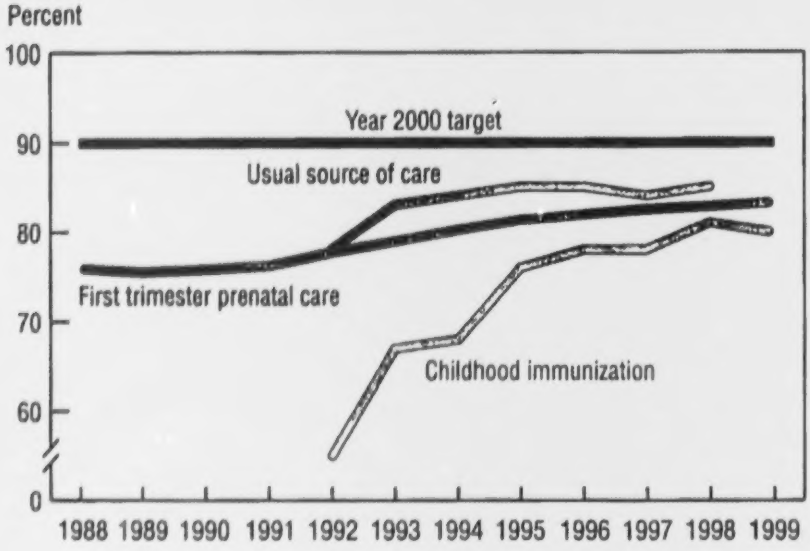
Figure N. Assessment of disparity for people with low socioeconomic status objectives



NOTE: Disparity is assessed by comparing the change for the special population with the change for the total population. Not all objectives for the special population are applicable to disparity assessment. (See Disparity Assessment section in the Appendix.)

Figure O. Access to care: United States, 1988–99



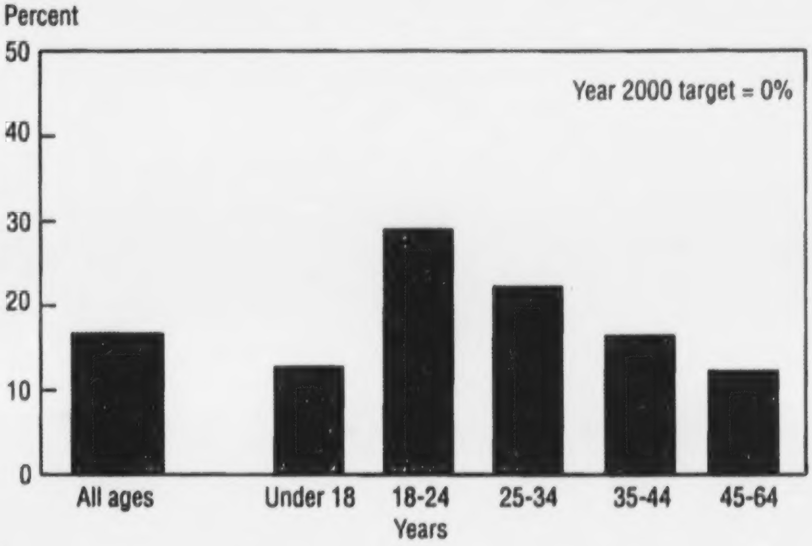
	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Year 2000 target*
First trimester prenatal care	75.9%	75.5%	75.8%	76.2%	77.7%	78.9%	80.2%	81.3%	81.9%	82.55%	82.8%	83.2%	90%
Childhood immunizations . .	- - -	- - -	- - -	- - -	55%	67%	68%	76%	78%	78%	81%	80%	90%
Usual source of care.	- - -	- - -	80%	- - -	78%	83%	84%	85%	85%	84%	85%	- - -	90%

- - - Data not available.

Notes: Data for immunizations are for children 19–35 months receiving the 4 DTP:3 MMR:1 Polio series; data for usual source of care are for people 18 years and over. 1999 data for early prenatal care are preliminary.

SOURCES: CDC/NCHS, National Vital Statistics System; CDC/NCHS, National Health Interview Survey; CDC/NCHS, CDC/NI, National Immunization Survey.

Figure P. Percent of people under 65 years without health insurance coverage: United States, 1998



	All ages	*Under 18 years*	*18–24 years*	*25–34 years*	*35–44 years*	*45–64 years*
People without health insurance	16.6%	12.7%	29.0%	22.2%	16.4%	12.2%

SOURCE: CDC/NCHS, National Health Interview Survey.

Health Status Indicators and Priority Data Needs

Health Status Indicators and Priority Data Needs

Health Status Indicators

Healthy People 2000 objective **22.1** called for the development of a set of Health Status Indicators (HSIs) appropriate for use by Federal, State, and local health agencies (1). The purpose of the HSIs was to make it possible to compare health status measures among national, State, and local levels. Under the auspices of the Centers for Disease Control and Prevention, a group of public health professionals, known as Committee 22.1, was convened, and through a rigorous consensus process, a list of 18 Health Status Indicators was developed (2). The HSI definitions are discussed in detail in *Healthy People Statistical Notes*, number 3, "Health Status Indicators: Definitions and National Data" (3).

Most of the HSIs are comparable to specific *Healthy People 2000* objectives. However, several HSIs were defined differently from corresponding objectives in *Healthy People 2000*.

The *International Classification of Diseases, Ninth Revision* (ICD–9) codes used for the mortality indicators come from established NCHS cause-of-death lists. For three of the HSIs these codes are different from ICD–9 codes used for similar *Healthy People 2000* objectives. The HSI for homicide includes deaths due to legal intervention (ICD–9: E970–E978) while objective **7.1** is based only on ICD–9 codes E960–E969. The HSI for lung cancer deaths includes cancer of the trachea (ICD–9: 162.0), which is excluded from duplicate objectives **3.2** and **16.2**. The HSI for heart disease deaths is based on ICD–9 codes 390–398, 402, and 404–429, while duplicate objectives **1.1**, **3.1**, and **15.1** focus specifically on coronary heart disease deaths (ICD–9: 402, 410–414, and 429.2). With the exception of heart disease, the differences in the death rates between the HSIs and the corresponding *Healthy People 2000* objectives are relatively small.

The data source for the HSI and for objective **10.1** for work-related injury deaths is the Census of Fatal Occupational Injuries, Bureau of Labor Statistics, Department of Labor. However, the HSI rate is for the total population 16 years of age and over and the denominator is obtained from the Bureau of the Census. For objective **10.1**, the rate is for full-time workers 16 years of age and over and the denominator is provided by the Bureau of Labor Statistics.

All of the HSIs were defined so that the higher rate would indicate poorer health status, contrary to several corresponding *Healthy People 2000* objectives. Prenatal care is measured by the percent of mothers delivering live infants who did *not* receive care during the first trimester of pregnancy; air quality is measured by the percent of people living in counties *exceeding* U.S. Environmental Protection Agency (EPA) standards for air quality during the previous year.

Three HSIs (total deaths, births to adolescents, and childhood poverty) have no corresponding *Healthy People 2000* objective. Recent trend data and data by race and Hispanic origin for the 18 HSIs are shown in tables B and C.

Two reports have been published in the *Statistical Notes* series discussing the national data for the Health Status Indicators by race and Hispanic origin (4) and an assessment of the HSIs for each State (5).

Priority Data Needs

As part of their mandate to identify a set of indicators of community health status that would be relevant to public health practice, Committee 22.1 also produced a list of 16 Priority Data Needs (PDNs) (5), for which State-level data were not available at the time. These measures included indicators of processes affecting health, as well as additional indicators of risk factors and health outcomes. Most of the PDNs generally correspond to objectives in *Healthy People 2000*. However, because of differences in the data systems used at the national and State levels, there are some differences in definition between some of the PDNs and the corresponding *Healthy People 2000* objectives (6). These difference are noted in table D. There were no specific objectives for several PDN measures (health care coverage for the population under 18 years of age, regular source of primary and dental care for children and adolescents, and blood lead testing in children under 5 years of age.) National-level data for the corresponding *Healthy People 2000* objectives are also presented in table D.

As recommended by Committee 22.1, existing data collection systems have been modified to address the priority data needs, and State-level data are now available for thirteen PDNs from the data sources shown in table D. There are still no sources of State-level data on several PDNs (regular source of primary care and dental services for children and adolescents, overweight in adolescents, blood lead levels in children, incidence of Hepatitis B, and prevalence of dental decay in children and adolescents). These measures remain on a list of data needs.

In the course of developing the *Healthy People 2010* objectives, a set of Leading Health Indicators (LHIs) was identified (see Introduction). The LHIs focus on individual behaviors, physical and social environmental factors, and health system measures that are viewed as determinants of health. Four of the HSIs (motor vehicle crash deaths, homicide, prenatal care, and air quality) and seven of the PDNs (immunization for children and elderly, health care coverage, regular source of care, smoking, alcohol misuse, and overweight), for which both national and State-level data are available, have been incorporated in the LHIs.

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Table B. Health Status Indicators: United States, 1996–98

	Health status indicators	*1996*	*1997*	*1998*
1	Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age	7.3	7.2	7.2
	White	6.1	6.0	6.0
	Black	14.7	14.2	14.3
	American Indian/Alaska Native[1]	10.0	8.7	9.3
	Chinese[1]	3.2	3.1	4.0
	Japanese[1]	*4.2	*5.3	*3.5
	Filipino[1]	5.8	5.8	6.2
	Hawaiian and part-Hawaiian[1]	*	*	*
	Other Asian or Pacific Islander[1]	5.7	5.0	5.7
	Hispanic origin[1,2]	6.1	6.0	5.8
2	Total deaths per 100,000 population (ICD–9 nos. 0–E999)[3]	491.6	479.1	471.7
3	Motor vehicle crash deaths per 100,000 population (ICD–9 nos. E810–E825)[3]	16.2	15.9	15.6
4	Work-related injury deaths per 100,000 population[4]	3.1	3.0	2.9
5	Suicides per 100,000 population (ICD–9 nos. E950–E959)[3]	10.8	10.6	10.4
6	Homicides per 100,000 population (ICD–9 nos. E960–E978)[3]	8.5	8.0	7.3
7	Lung cancer deaths per 100,000 population (ICD–9 no. 162)[3]	37.9	37.4	37.0
8	Female breast cancer deaths per 100,000 females (ICD–9 no. 174)[3]	20.2	19.4	18.8
9	Cardiovascular disease deaths per 100,000 population (ICD–9 nos. 390–448)[3]	170.7	166.1	161.2
	Heart disease deaths per 100,000 population (ICD–9 nos. 390–398, 402, 404–429)[3]	134.5	130.5	126.6
	Stroke deaths per 100,000 population (ICD–9 nos. 430–438)[3]	26.4	25.9	25.1
10	Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome[5,6]	27.8	23.1	19.5
11	Reported incidence (per 100,000 population) of measles	0.2	0.05	0.04
12	Reported incidence (per 100,000 population) of tuberculosis	8.0	7.4	6.8
13	Reported incidence (per 100,000 population) of primary and secondary syphilis	4.3	3.2	2.6
14	Prevalence of low birth weight as measured by the percentage of live born infants weighing under 2,500 grams at birth	7.4	7.5	7.6
15	Births to adolescents (10–17 years) as a percentage of total live births	5.1	4.9	4.6
16	Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy	18.1	17.5	17.2
17	Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level			
	Under 18 years	20.5	19.9	18.9
	Under 15 years	21.1	20.5	19.5
	5–17 years[7]	18.9	18.8	17.8
18	Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year[8]	18.7	21.1	23.5

*Infant mortality rates for groups with fewer than 10,000 births are considered unreliable. Infant mortality rates for groups with less than 7,500 births are considered highly unreliable and are not shown.

[1] Rates based on a period-linked birth and infant death file using weighted data. See text for Priority Area 14.

[2] Hispanic origin can be of any race.

[3] Age adjusted to the 1940 U.S. standard population.

[4] Data are for people 16 years and over.

[5] By date of diagnosis. Adjusted for delays in reporting; not adjusted for underreporting.

[6] Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.

[7] Related children in families.

[8] Data based on 1990 county population estimates.

Health status indicators

Number	*Data source*
1–3,5–9,14–16	National Vital Statistics System, CDC, NCHS.
4	Census of Fatal Occupational Injuries, DOL, BLS.
10	HIV/AIDS Surveillance System, CDC, NCHSTP.
11	National Notifiable Disease Surveillance System, CDC, EPO.
12	Tuberculosis Morbidity Data, CDC, NCHSTP.
13	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
17	Current Population Survey, U.S. Bureau of the Census.
18	National Air Quality and Emission Trends Report, EPA, OAR.

Table C. Health Status Indicators by race and Hispanic origin: United States, 1998

	Health status indictors	Total	Race				
			White	Black	American Indian or Alaska Native	Asian or Pacific Islander	Hispanic origin[1]
1	Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age	7.2	6.0	14.3	[2]9.3	[2]5.5	[2]5.8
2	Total deaths per 100,000 population (ICD–9 nos. 0–E999)[3]	471.7	450.3	690.9	458.1	264.6	342.8
3	Motor vehicle crash deaths per 100,000 population (ICD–9 nos. E810–E825)[3]	15.7	15.7	16.6	31.8	8.6	14.9
4	Work-related injury deaths per 100,000 population[4]	2.9	2.9	2.4	1.7	1.9	3.4
5	Suicides per 100,000 population (ICD–9 nos. E950–E959)[3]	10.4	11.2	5.9	13.4	5.9	6.0
6	Homicides per 100,000 population (ICD–9 nos. E960–E978)[3]	7.3	4.3	25.2	9.9	3.7	9.9
7	Lung cancer deaths per 100,000 population (ICD–9 no. 162)[3]	37.0	36.8	44.6	25.1	17.2	13.6
8	Female breast cancer deaths per 100,000 females. (ICD–9 no. 174)[3]	18.8	18.3	25.3	10.3	9.9	12.1
9	Cardiovascular disease deaths per 100,000 population (ICD–9 nos. 390–448)[3]	161.2	154.1	240.2	123.8	95.6	109.3
	Heart disease deaths per 100,000 population (ICD–9 nos. 390–398, 402, 404–429)[3]	126.7	122.0	183.3	97.1	67.5	84.2
	Stroke deaths per 100,000 population (ICD–9 nos. 430–438)[3]	25.1	23.3	41.4	19.6	22.7	19.0
10	Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome[5]	19.5	[6]8.5	[6]82.9	9.4	4.3	33.0
11	Reported incidence (per 100,000 population) of measles	0.04	- - -	- - -	- - -	- - -	- - -
12	Reported incidence (per 100,000 population) of tuberculosis	6.8	[6]2.3	[6]17.8	12.6	36.6	13.6
13	Reported incidence (per 100,000 population) of primary and secondary syphilis	2.6	[6]0.5	[6]17.1	2.8	0.4	1.5
14	Prevalence of low birth weight as measured by the percentage of live born infants weighing under 2,500 grams at birth	7.6	6.5	13.0	6.8	7.4	6.4
15	Births to adolescents (10–17 years) as a percentage of total live births	4.6	3.5	7.6	8.4	2.0	6.9
16	Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy	17.2	15.2	26.7	31.2	16.9	25.7
17	Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level						
	Under 18 years	18.9	15.1	36.7	- - -	- - -	34.4
	Under 15 years	19.5	15.5	38.4	- - -	- - -	34.7
	5–17 years[7]	17.8	- - -	- - -	- - -	- - -	- - -
18	Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year[8]	23.5	22.6	24.9	18.9	44.9	43.8

- - - Data not available.

[1] Hispanic origin can be of any race.

[2] Rates based on a period linked birth and infant death file using weighted data. See text for Priority Area 14.

[3] Age adjusted to the 1940 standard population.

[4] Data are for people 16 years and over.

[5] Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.

[6] Data are for the non-Hispanic population.

[7] Related children in families.

[8] Data based on 1990 county population estimates.

Health status indicators

Number	Data source
1–3,5-9,14–16	National Vital Statistics System, CDC, NCHS.
4	Census of Fatal Occupational Injuries, DOL, BLS.
10	HIV/AIDS Surveillance System, CDC, NCHSTP.
11	National Notifiable Disease Surveillance System, CDC, EPO.
12	Tuberculosis Morbidity Data, CDC, NCHSTP.
13	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
17	Current Population Survey, U.S. Bureau of the Census.
18	National Air Quality and Emission Trends Report, EPA, OAR.

Table D. Priority Data Needs

Priority Data Need	Objective number	Duplicate objective number	1998 national data	National data source	State data source
Indicators of Processes:					
1 Children 19–35 months of age who have been immunized with 4-3-1 series	20.11		[1]80%	NIS	NIS
2 Adults 65 years and over who have been immunized for					
a. Pneumonia	20.11		46%	NHIS	BRFSS
b. Influenza	20.11		63%	NHIS	BRFSS
3 Assessed rivers, lakes, and estuaries that support					
a. Consumable fish					
Rivers	11.10		88%	NWQI	NWQI
Lakes	11.10		59%	NWQI	NWQI
Estuaries	11.10		65%	NWQI	NWQI
b. Recreational activities					
Rivers	11.10		72%	NWQI	NWQI
Lakes	11.10		80%	NWQI	NWQI
Estuaries	11.10		91%	NWQI	NWQI
4 Women 18 years and over receiving a Pap test in preceding 3 years	16.12		79%	NHIS	BRFSS
5 Women 50 years and over receiving a mammogram in preceding 2 years	[2]16.11		[2]64%	NHIS	BRFSS
6 Population without health care coverage					
a. Under 18 years	- - -		[3]	NHIS	CPS
b. 18–64 years	21.4		[4]16.6%	NHIS	BRFSS
7 Population with a regular source of					
a. Primary care					
5–17 years	- - -		[3]	NHIS	- - -
18 years and over	21.3		85%	NHIS	BRFSS
b. Dental services (dental visit in past year)					
5–17 years	- - -		[3]	MEPS	- - -
18 years and over	13.14		[5]65%	NHIS	BRFSS
Indicators of Risk Factors:					
8 Cigarette smoking					
a. Grades 9–12	4.6	3.20	[6]18.2%	NHSDA	YRBS
b. 18 years and over	3.4	15.12, 16.6	24%	NHIS	BRFSS
9 Alcohol misuse					
a. Grades 9–12	4.7		[1,7]30.8%	MTF	YRBS
b. 18 years and over	4.7		[1,8]40.0%	MTF	BRFSS
10 Overweight					
a. 12–17 years	2.3	1.2, 15.10, 17.12	[9,10]24%	NHANES	- - -
b. 18 years and over	2.3	1.2, 15.10, 17.12	[10,11]35%	NHANES	BRFSS
11 Hypertension awareness (18 years and over)	15.13		[12]85%	NHIS	BRFSS
12 Hypercholesterolemia awareness (18 years and over)	15.14		[13]67%	NHIS	BRFSS
13 Confirmed abuse and neglect of children (per 1,000 children)	7.4		[14]41.9	NCANDS	NCANDS
Indicators of Health Status Outcomes:					
14 Children under 5 years of age who have been					
a. Tested for blood lead levels	- - -		- - -		- - -
b. Tested and have blood lead levels greater than 15 µg/dL	11.4		[10,15]393,000	NHANES	- - -
15 Incidence of hepatitis B (per 100,000 population)	20.3		[1]16.9	NNDSS	NNDSS
16 Children with one or more decayed primary or permanent teeth					
a. 6–8 years	13.1		[10]52%	NHANES	- - -
b. 15 years	13.1		[10]61%	NHANES	- - -

- - - Not available.

[1] 1999 data.

[2] Data are for clinical breast examination and mammogram.

[3] Data are not shown. Not a *Healthy People 2000* objective.

[4] Preliminary data for persons under 65 years.

[5] Data are for persons 35 years and over.

[6] Data are for persons 12–17 years.
[7] Data are for high school seniors.
[8] Data are for college students.
[9] Data are for persons 12–19 years.
[10] 1988–1994 data.
[11] Data are for persons 20 years and over.
[12] Data are for people who can state their blood pressure is high.
[13] Data are for people who had their blood cholesterol checked in past 5 years.
[14] 1993 data.
[15] Data are for persons 1–5 years of age.

Data source acronyms:

BRFSS	Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
CPS	Current Population Survey, U.S. Bureau of the Census.
MEPS	Medical Expenditure Panel Survey, AHRQ.
MTF	Monitoring the Future, NIH, NIDA
NHANES	National Health and Nutrition Examination Survey, CDC, NCHS
NHIS	National Health Interview Survey, CDC, NCHS
NHSDA	National Household Survey on Drug Abuse, SAMHSA, OAS
NCANDS	National Incidence of Child Abuse and Neglect Survey, Administration for Children and Families, NCCAN.
NIS	National Immunization Survey, CDC, NIP and NCHS
NNDSS	National Notifiable Disease Surveillance System, CDC, EPO
NWQI	National Water Quality Inventory, EPA, Office of Water
YRBSS	Youth Risk Behavior Surveillance System, CDC, NCCDPHP.

Sentinel Objectives

Sentinel Objectives

In the original *Healthy People 2000* publication, objectives that were representative of the scope and magnitude of the improvements envisioned in *Healthy People 2000* were identified as "sentinel objectives" (1). Forty-seven objectives were selected from the four categories of priority areas—Health Promotion, Health Protection, Preventive Services, and Surveillance and Data Systems—and at least one objective from each of the 22 priority areas was included. Sixteen objectives were selected from the eight Health Promotion Priority Areas, 10 objectives were selected from the 5 Health Protection Priority Areas, and 20 objectives were selected from the 8 Preventive Services Priority Areas. One objective from the Surveillance and Data Systems Priority Area, a cross-cutting priority area that supports each of the others, was also selected. The sentinel objectives are listed in table E.

A summary assessment of progress toward achieving the objectives of *Healthy People 2000* based on the sentinel objectives was published in 1995 (2). A similar summary based on recent data is included here. Because the success of Healthy People depends on the combined efforts of governmental agencies, professional associations, and private and voluntary organizations acting at the local level, this summary includes data at the State level for those objectives where sources of State data are available.

National Data

A summary of target attainment status for each of the sentinel objectives in the United States is shown in table E. For each objective, a progress quotient of the targeted change achieved is shown along with a color code indicating the current status of progress toward meeting the year 2000 target. Calculation of the progress quotient is described in the *Measuring Progress Toward the Healthy People 2000 Targets* section in the Appendix. One hundred percent indicates that the target has been met. Negative percentages indicate that the change from the baseline to the most recent value is moving away from the year 2000 target. Dark green indicates that the target has been met for 2 years in a row or in two successive surveys. Light green indicates that the target was met in the most recent year or survey cycle but not in the previous year or survey cycle. Rose indicates that the most recent value is between the baseline and the target and, therefore, progress has been made although the target has not been met. Burgundy indicates that the most recent value is outside the baseline value, that is, the most recent data are higher than the baseline for objectives that targeted reduction or lower than the baseline for objectives that targeted an increase. In these cases, the change from baseline to most recent data is moving away from the target.

Health Promotion Priority Areas

There are 19 measures associated with the 16 sentinel objectives in the Health Promotion Priority Areas (table E). Data on the baselines and most recent values for these objectives are shown in the detailed tables for the individual priority areas in the *Healthy People* Priority Areas section of this *Review*. Targets were met for 5 of the 19 measures or 5 of the 16 objectives in the Health Promotion Priority Areas: Increases in physical activity for adults, reductions in suicide deaths, reductions in people reporting stress, reductions in homicide deaths, and increases in workplaces with health promotion programs. Movement toward the target was evident for 10 measures associated with 8 objectives. Percent changes ranged from 7 percent for the objective to increase the age of initiation of smoking by youth to 93 percent for reduction in alcohol-related motor vehicle fatalities. Data for four measures associated with four different objectives were unchanged from the baseline or moving in the wrong direction. Compared with the baseline, the proportion of the population with a sedentary lifestyle did not change. Change for three measures—reducing overweight, reducing marijuana use by youth, and reducing assault injuries—was away from the target. Data are not available to assess objective **8.4** concerning an increase in the proportion of schools with health education programs.

Health Protection Priority Areas

Eleven measures are associated with the ten sentinel objectives in the Health Protection Priority Areas. None of the targets for these objectives were met. On the other hand, all of these measures moved toward the year 2000 targets. Changes range from achieving 11 percent of the target to reduce the proportion of children with dental caries to reaching 97 percent of the target to reduce the level of lead in children's blood.

Preventive Services Priority Areas

The Preventive Services Priority Areas include 21 measures associated with 20 sentinel objectives. Targets were met for six objectives: reduction in coronary heart disease deaths, reversal in the rise in cancer deaths, increase in breast exam and mammography, reduction in HIV infection, reduction in syphilis infection, and reduction in epidemic-related pneumonia and influenza deaths. Objective **16.1** targeted a reduction in the age-adjusted cancer death rate from 134 deaths per 100,000 population in 1987 to 130 per 100,000 in the year 2000. In 1998, an age-adjusted cancer death rate of 124 per 100,000 was achieved. The reduction of 10 deaths per 100,000 was 2½ times the targeted change of 4 deaths per 100,000. Compared with the baseline, four objectives moved away from the target: the percent of low birthweight infants increased, the percent of people limited in activity by chronic conditions increased, the diabetes-related death rate increased, and the percent of the population with no health insurance coverage increased.

Surveillance and Data Systems Priority Area

Objective **22.1** called for the development and implementation of a set of common health status indicators for use by Federal, State, and local health agencies. A set of 18 indicators was developed by consensus and published in 1991 (3). These Health Status Indicators have been broadly used to monitor changes in health status over time and to compare health status among racial and ethnic groups (see Health Status Indicators/Priority Data Needs section). The Health Status Indicators have also been used to compare States (4) and to compare local geographic areas within States (5).

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Table E. An assessment of target attainment for the *Healthy People 2000* sentinel health objectives for the United States and individual States

Priority areas and objectives	United States: Percent of targeted change achieved	United States: National target status	Target status for States: Met: For 2 years or 2 surveys[1]	Target status for States: Met: Most recent year only[2]	Target status for States: Not met: Between national baseline and target[3]	Target status for States: Not met: "Worse" than the national baseline[4]
		Met				
Health Promotion Priority Areas						
Physical Activity and Fitness						
1.3 Moderate physical activity (5+ times a week)	100.0	Met	*	*	*	*
(7+ times a week)	28.6		NA	NA	NA	NA
1.5 Sedentary lifestyle	0.0		0	0	12	39
Nutrition						
2.3 Overweight prevalence	-150.0		*	*	*	*
2.5 Dietary fat intake	33.3		NA	NA	NA	NA
Tobacco						
3.4 Cigarette smoking prevalence	35.7		1	0	48	[illegible]
3.5 Smoking initiation	6.7		See objective 4.6 for cigarettes			
Substance Abuse: Alcohol and Other Drugs						
4.1 Alcohol-related motor vehicle crash deaths	93.0		15	4	26	6
4.6 Alcohol use by adolescents	68.8		NA	NA	NA	NA
Marijuana use by adolescents	-131.8		*	*	*	*
Cocaine use by adolescents	66.7		NA	NA	NA	NA
Cigarette use by adolescents	26.9		*	*	*	*
Family Planning						
5.1 Adolescent pregnancy	40.6		NA	NA	NA	NA
Live births to adolescents			15	3	21	12
5.2 Unintended pregnancies	26.9		NA	NA	NA	NA
Mental Health and Mental Disorders						
6.1 Suicide	108.3	Met	12	7	10	22
6.5 Adverse health effects from stress	114.1	Met	NA	NA	NA	NA
Violent and Abusive Behavior						
7.1 Homicide	107.7	Met	22	4	6	11
7.6 Assault injuries	-50.0		NA	NA	NA	NA
Educational and Community-Based Programs						
8.4 Comprehensive school health education	CA	CA	NA	NA	NA	NA
8.6 Worksite health promotion activities	125.0	Met	NA	NA	NA	NA
Health Protection Priority Areas						
Unintentional Injuries						
9.1 Unintentional injury deaths	85.2		19	1	9	22
9.12 Motor vehicle occupant protection systems	58.1		[illegible]	0	47	[illegible]
Occupational Safety and Health						
10.1 Work-related injury deaths	75.0		15	2	17	17
10.2 Work-related injuries	88.2		10	5[5]	20[5]	6
Environmental Health						
11.4 Blood lead levels in children	96.6		NA	NA	NA	NA
11.5 Air quality	75.9		31	5	10	5
11.6 Homes with radon testing	34.3		NA	NA	NA	NA
Food and Drug Safety						
12.2 *Salmonella enteriditis* outbreaks	63.5		NA	NA	NA	NA
Oral Health						
13.1 Dental caries in children	10.5		NA	NA	NA	NA
Adolescents 15 years	94.4		NA	NA	NA	NA
13.4 Complete tooth loss in adults 65 years and over	43.8		NA	NA	NA	NA

Table E. An assessment of target attainment for the *Healthy People 2000* sentinel health objectives for the United States and individual States-Con.

Preventive Services Priority Areas						
Maternal and Infant Health						
14.1 Infant mortality	93.5		16	3	28	4
14.5 Low birth weight	-36.8		0	0	16	[illegible]
14.11 Prenatal care in first trimester	48.6		0	0	47	[illegible]
Heart Disease and Stroke						
15.1 Coronary heart disease deaths	108.6	Met	28	5	18	0
15.2 Stroke deaths	51.0		2	2	40	7
15.4 Controlled high blood pressure	46.2		NA	NA	NA	NA
15.6 Mean serum cholesterol level	76.9		NA	NA	NA	NA
Cancer						
16.1 Cancer deaths	250.0	Met	26	7	9	9
16.11 Breast examination and mammogram	111.4	Met	47	2	1	0
16.12 Pap test	40.0		23	8	19	0
16.13 Fecal occult blood test	34.8		*	*	*	*
Proctosigmoidoscopy	80.0		*	*	*	*
Diabetes and Chronic Disabling Conditions						
17.2 Limitation in major activity due to chronic conditions	-42.9		NA	NA	NA	NA
17.9 Diabetes-related deaths	-75.0		5	1	16	29
HIV Infection						
18.2 HIV infection prevalence	&	Met	NA	NA	NA	NA
Sexually Transmitted Diseases						
19.1 Gonorrhea	83.5		26	0	21	4
19.3 Primary and secondary syphilis	110.6	Met	38	1	12	0
Immunization and Infectious Diseases						
20.1 Measles	97.1		20	12	19	0
20.2 Epidemic-related pneumonia and influenza deaths	102.5	Met	NA	NA	NA	NA
20.11 Childhood immunization	71.4		0	2	49	0
Clinical Preventive Services						
21.4 Financial barriers to receipt of clinical preventive services	-11.5		0	0	24	27
Surveillance and Data Systems Priority Area						
22.1 Develop health status indicators	100.0	Met	CA	CA	CA	CA

■	Year 2000 target met for two years in a row or in two successive surveys.
☐	Target met in the most recent year or survey cycle but not in the previous year or survey cycle.
☐	Most recent data indicates change in the direction of the target.
■	Most recent data "worse" than the baseline for the United States.

* Data for States are not sufficiently comparable with data for the United States to permit assessment of target attainment.
0.0 Quantity more than zero but less than 0.05.
CA Cannot assess progress for this objective.
NA Data for States are not available.
& This objective has met its target. A progress quotient could not be calculated.

[1] Number of States that met the target for the two most recent years or the two most recent surveys.

[2] Number of States that met the target for the most recent year only.

[3] Number of States with most recent rates between the national target and the national baseline.

[4] Number of States with most recent rates equal to or greater than the national baseline for objectives with targeted reductions, or equal to or less than the baseline for objectives with targeted increases.

[5] Based on data for 41 States.

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State Data

The national *Healthy People 2000* targets generally were set based on data available at the national level. In order to assess the attainment of these national targets at the State level, comparable sources of data are required. There are 18 sentinel objectives for which State and national data are comparable because they rely on the same sources. There are six additional objectives for which national and State data are based on different sources but they are sufficiently comparable to determine which States have met the national target. Finally, data for States are shown for four other sentinel objectives for which national and State data are not comparable; for these objectives the data provide a basis for comparison among States, and States in the quartile with the most favorable rates are identified. Since the data are not comparable, no assessment of target attainment at the State level is made. Altogether, State-level data are shown for 29 of the 47 sentinel objectives. State-level data are shown for 31 measures associated with these 29 objectives (figures Q–ZZ).

Attainment of the national target for an objective at the State level requires that the target be met for two successive calendar years or for two successive survey cycles. Attainment of the target in a single year could be primarily a function of the variability in rates. Attainment for two successive years or survey cycles provides some assurance that attainment was not just a function of year-to-year variability in rates. In the tables and maps that follow, dark green is used to indicate that the target was met for two successive years or survey cycles. Light green indicates that the target was met only in the most recent year or the most recent survey cycle. For objectives that called for reduction, rose indicates that the rate for the most recent year was greater than the national target and less than the national baseline. The national baseline represents the rate for the United States at the beginning of the monitoring decade. For objectives that targeted an increase in rates, rose indicates that the rate for the most recent year was less than the national target and greater than the baseline for the United States. Burgundy identifies States for which rates in the most recent year were worse than the national baseline, that is, the rate was greater than the national baseline for objectives that targeted reductions or less than the baseline for objectives that targeted increases. A similar analysis of target attainment for the 18 Health Status Indicators associated with objective **22.1** (discussed in Health Status Indicators/Priority Data Needs section) has been published elsewhere (4).

Many States developed objectives and set targets for their own populations. These State-specific objectives and targets may differ from the *Healthy People 2000* objectives for the Nation. Use of the national target is convenient because it provides a single standard against which all States can be compared, some States, however, had already achieved the national target at the beginning of the period. Other States may have had rates so much worse than those of the United States at the baseline that they could not realistically expect to achieve the national target. In this section, when sufficiently comparable sources of national and State data are available, States are assessed in terms of whether or not they met the national target.

A summary of target attainment for the sentinel objectives among States is also shown in table E. The numbers of States that met or did not meet the national target are shown on the right.

Health Promotion Priority Areas

In the Health Promotion Priority Areas, State-level data for six objectives are sufficiently comparable to national data to determine whether national targets were met. For example, objective **7.1** to reduce the homicide death rate was met by 26 States. More States met this objective than any of the other objectives in the health promotion priority areas. State-specific data are shown in figures Q–BB for 9 of the 16 objectives (or 10 of the 19 measures) in the health promotion priority areas. Data for States are shown for four measures for which national and State data are not strictly comparable. These measures are identified by asterisks (*) in table E. Objectives for which data at the State level were not available (NA) are identified in table E. No State-level data were available to monitor the sentinel objectives in the Educational and Community-Based Programs priority area.

Health Protection Priority Areas

State-level data for five of the objectives in the Health Protection Priority Areas are sufficiently comparable to national data to determine whether national targets were met in States. Objective **11.5** to increase the proportion of people in areas with good air quality was met by more States (36 States) than any other objective in these priority areas. State-level data are shown in figures CC–GG for 5 of the 10 objectives in the Health Protection Priority Areas. No State-level data were available to monitor sentinel objectives in the Food and Drug Safety and Oral Health priority areas.

Preventive Services Priority Areas

In the Preventive Services Priority Areas, State-level data for 14 objectives are sufficiently comparable to national data to determine whether national targets were met in each State. More States (49 States) met objective **16.11** to increase the proportion of women who had a clinical breast exam and mammogram within the last 2 years (47 States) than any of the other objectives in the Preventive Services Priority Areas. In fact, more States met the target for this objective than any of the other sentinel objectives. State-specific data are shown in figures HH–ZZ for 15 of the 20 objectives (or 16 of the 21 measures) in the Preventive Services Priority Areas. Data for States are included for two measures for which national and State data are not strictly comparable (*).

No suitable measure of the extent to which States made use of the Health Status Indicators was developed in conjunction with objective **22.1**. Anecdotal evidence suggests that States used the Health Status Indicators in their own efforts to disseminate data at both the State and local level (5).

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5. National Center for Health Statistics. Health Status Indicator reports: "State of the art." Statistics and surveillance; no 8. Hyattsville, Maryland: Public Health Service. 1996.

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Figure Q. Objective 1.3–Percent of adults who participated in regular physical activity (5 or more times per week): United States and each State, 1996 and 1998

	Percent of adults	
	1996	1998
United States (NHIS)	23.0[1]	30.0
Median of States (BRFSS)	21.0	20.4
Alabama	17.6	21.4
Alaska	23.8	24.8
Arizona	21.0	13.5
Arkansas	18.1	15.4
California	21.4	24.7
Colorado	25.1	24.1
Connecticut	21.4	20.4
Delaware	16.1	17.2
District of Columbia	20.0	20.3
Florida	21.0	20.5
Georgia	11.6	18.0
Hawaii	28.1	30.3
Idaho	25.1	27.1
Illinois	21.1	21.9
Indiana	13.5	19.5
Iowa	18.9	19.8
Kansas	17.9	14.3
Kentucky	12.4	13.0
Louisiana	15.9	16.1
Maine	21.0	24.2
Maryland	13.3	25.0
Massachusetts	24.2	22.0
Michigan	22.8	23.6
Minnesota	24.1	21.7
Mississippi	17.0	19.2
Missouri	17.8	19.1
Montana	24.2	22.5
Nebraska	20.2	19.1
Nevada	24.7	25.6
New Hampshire	22.5	23.7
New Jersey	22.4	19.1
New Mexico	23.9	25.8
New York	20.0	19.7
North Carolina	13.6	18.5
North Dakota	16.8	18.7
Ohio	10.2	19.0
Oklahoma	16.4	15.7
Oregon	25.7	26.7
Pennsylvania	20.4	19.4
Rhode Island	23.4	20.4
South Carolina	14.3	17.8
South Dakota	18.6	18.2
Tennessee	14.3	16.6
Texas	21.5	20.8
Utah	27.2	27.2
Vermont	24.7	25.5
Virginia	21.4	21.3
Washington	26.3	25.5
West Virginia	12.8	13.5
Wisconsin	22.1	20.2
Wyoming	28.4	28.2

[1] 1995 data.

United States – In 1998, based on data from the National Health Interview Survey (NHIS), 30 percent of the population 18-74 years of age participated in light-to-moderate physical activity 5 or more times per week. The national target (30 percent) for Objective 1.3 was, therefore, attained. The baseline in 1985 was 22 percent for people 18-64 years of age.

In 1998, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of the population 18 years and older who participated in regular and sustained physical activity (5 or more times per week, 30 or more minutes per session, regardless of intensity) for the States was 20.4.

States – It is not appropriate to assess attainment of the national target based on the BRFSS data because the NHIS and BRFSS are not comparable and the national target was set based on data from the NHIS. The 12 States in the highest quartile for the percent of the population 18 years and older participating in regular and sustained physical activity in 1998 are identified below.

Hawaii	30.3
Wyoming	28.2
Utah	27.2
Idaho	27.1
Oregon	26.7
New Mexico	25.8
Nevada	25.6
Vermont	25.5
Washington	25.5
Maryland	25.0
Alaska	24.8
California	24.7

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure R. Objective 1.5–Percent of adults who reported no leisure-time physical activity: United States and each State, 1996 and 1998

	Percent of adults 18 years and older		Target status (15.0)
	1996	1998	
United States (NHIS)	23.0[1]	24.0	■
Median of States (BRFSS)	27.8	27.7	■
Alabama	32.4	29.7	■
Alaska	25.4	23.5	□
Arizona	33.3	51.3	■
Arkansas	37.4	35.9	■
California	23.6	25.5	■
Colorado	20.2	21.3	□
Connecticut	25.6	27.1	■
Delaware	36.1	35.4	■
District of Columbia	30.3	38.5	■
Florida	27.1	31.1	■
Georgia	51.4	29.6	■
Hawaii	21.0	18.0	□
Idaho	20.6	20.4	□
Illinois	24.9	27.1	■
Indiana	31.0	27.1	■
Iowa	26.9	26.7	■
Kansas	36.4	38.3	■
Kentucky	45.6	42.7	■
Louisiana	34.9	32.2	■
Maine	34.0	27.7	■
Maryland	33.8	20.3	□
Massachusetts	23.0	25.4	■
Michigan	23.3	21.4	□
Minnesota	23.6	25.5	■
Mississippi	39.5	33.8	■
Missouri	30.2	27.9	■
Montana	21.2	25.2	■
Nebraska	22.9	26.1	■
Nevada	22.7	24.1	■
New Hampshire	25.5	24.9	■
New Jersey	26.3	32.6	■
New Mexico	27.7	23.0	□
New York	30.4	31.0	■
North Carolina	40.7	27.7	■
North Dakota	33.9	33.1	■
Ohio	42.6	29.8	■
Oklahoma	38.2	43.0	■
Oregon	19.6	18.9	□
Pennsylvania	26.3	32.7	■
Rhode Island	26.7	29.9	■
South Carolina	29.7	33.7	■
South Dakota	34.8	33.3	■
Tennessee	40.8	35.8	■
Texas	27.9	27.9	■
Utah	17.1	17.1	□
Vermont	21.5	26.0	■
Virginia	29.2	24.8	■
Washington	19.1	17.6	□
West Virginia	42.7	43.7	■
Wisconsin	22.1	23.4	□
Wyoming	20.4	21.1	□

[1] 1995 data.

United States – In 1998, based on data from the National Health Interview Survey (NHIS), 24 percent of the population 18 years and older reported no leisure-time physical activities during the last 2 weeks. The national target for Objective 1.5 had not been attained (15 percent). The baseline in 1985 was 24 percent.

In 1998, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of the population 18 years and older who did not participate in any leisure-time physical activity during the previous month for the States was 27.7.

States

□ 12 — In 1998 there were 12 States with rates greater than the year 2000 target (15.0) and less than the 1985 baseline (24.0).

■ 39 — In 1998 there were 39 States with rates greater than or equal to the 1985 baseline (24.0).

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure S. Objective 2.3–Percent of persons 18 years and older who were overweight: United States and each State, 1998 and 1999

	Percent of persons 18 years and older	
	1998	1999
United States (NHANES)	---	35.0[1]
Median of States (BRFSS)	32.4	33.7
Alabama	35.8	37.5
Alaska	36.2	37.7
Arizona	22.5	22.9
Arkansas	33.4	38.1
California	31.0	33.5
Colorado	27.2	26.7
Connecticut	27.4	28.6
Delaware	32.8	32.0
District of Columbia	31.8	30.2
Florida	32.3	33.6
Georgia	33.3	35.9
Hawaii	27.8	28.8
Idaho	29.9	33.5
Illinois	33.5	36.0
Indiana	34.5	34.1
Iowa	34.6	36.6
Kansas	31.7	33.4
Kentucky	35.8	36.7
Louisiana	36.1	37.7
Maine	31.2	32.7
Maryland	34.5	32.7
Massachusetts	26.9	28.3
Michigan	34.6	36.8
Minnesota	32.5	29.2
Mississippi	37.5	41.8
Missouri	35.6	35.5
Montana	29.1	29.8
Nebraska	32.3	35.7
Nevada	27.0	28.9
New Hampshire	28.7	27.9
New Jersey	29.7	31.4
New Mexico	29.9	33.0
New York	28.6	31.9
North Carolina	32.7	34.9
North Dakota	33.5	36.3
Ohio	33.6	35.9
Oklahoma	32.4	37.2
Oregon	32.8	32.8
Pennsylvania	34.8	35.5
Rhode Island	30.3	32.3
South Carolina	34.6	37.3
South Dakota	30.5	36.1
Tennessee	32.4	34.5
Texas	34.9	36.1
Utah	28.8	30.0
Vermont	27.4	31.1
Virginia	31.8	35.0
Washington	32.3	31.8
West Virginia	37.8	41.3
Wisconsin	34.0	33.8
Wyoming	28.1	31.8

---Data not available.

[1] 1988-94 data.

United States – Based on data from the National Health and Nutrition Examination Survey (NHANES) for 1988-94, 35 percent of the population 18 years and older were overweight based on height and weight obtained in a physical examination. The year 2000 target for Objective 2.3 (20 percent) had not been attained for the period 1988-94. The baseline for Objective 2.3 was 26 percent for 1976-80.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of the population 18 years and older who were overweight based on a body mass index computed from self-reported height and weight was 33.7.

States – It is not appropriate to assess attainment of the national target based on the BRFSS data because the NHANES and BRFSS are not comparable and the national target was set based on data from the NHANES. The 12 States in the lowest quartile for the percent of the population who were overweight in 1999 based on the BRFSS are identified below.

Arizona	22.9
Colorado	26.7
New Hampshire	27.9
Massachusetts	28.3
Connecticut	28.6
Hawaii	28.8
Nevada	28.9
Minnesota	29.2
Montana	29.8
Utah	30.0
District of Columbia	30.2
Vermont	31.1

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

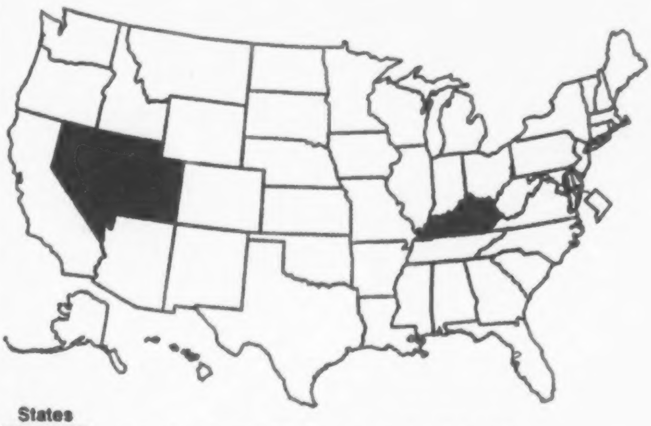
Figure T. Objective 3.4--Percent of persons 18 years and older who reported current cigarette smoking: United States and each State, 1998 and 1999

	Percent of persons 18 years and older		Target status (15.0)
	1998	1999	
United States (NHIS)	24.0	—	
Median of States (BRFSS)	22.9	22.8	
Alabama	24.6	23.5	
Alaska	26.1	27.3	
Arizona	21.9	20.1	
Arkansas	25.9	27.2	
California	19.2	18.7	
Colorado	22.8	22.5	
Connecticut	20.9	22.8	
Delaware	24.5	25.5	
District of Columbia	21.6	20.6	
Florida	22.0	20.6	
Georgia	23.6	23.8	
Hawaii	19.5	18.5	
Idaho	20.3	21.5	
Illinois	23.1	24.2	
Indiana	26.0	27.0	
Iowa	23.4	23.5	
Kansas	21.1	21.0	
Kentucky	30.8	29.7	■
Louisiana	25.5	23.5	
Maine	22.4	23.3	
Maryland	22.4	20.3	
Massachusetts	20.9	19.3	
Michigan	27.4	25.1	
Minnesota	18.0	19.5	
Mississippi	24.1	22.9	
Missouri	26.4	27.1	
Montana	21.5	20.2	
Nebraska	22.0	23.2	
Nevada	30.4	31.5	■
New Hampshire	23.3	22.3	
New Jersey	19.1	20.6	
New Mexico	22.6	22.5	
New York	24.1	21.8	
North Carolina	24.6	25.1	
North Dakota	20.0	22.1	
Ohio	26.1	27.6	
Oklahoma	23.9	25.2	
Oregon	21.1	21.4	
Pennsylvania	23.8	23.1	
Rhode Island	22.6	22.3	
South Carolina	24.7	23.6	
South Dakota	27.2	22.5	
Tennessee	26.1	24.8	
Texas	21.9	22.4	
Utah	14.2	14.0	■
Vermont	22.3	21.7	
Virginia	22.9	21.4	
Washington	21.4	22.4	
West Virginia	27.9	27.1	
Wisconsin	23.4	23.7	
Wyoming	22.8	23.9	

— Data not available.

United States -- Based on data from the National Health Interview Survey (NHIS), 24 percent of the population 18 years and older reported current cigarette smoking. The baseline in 1987 was 29 percent. Thirty-six percent of the change targeted by Objective 3.4 had been achieved in 1998.

Based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of persons 18 years and older who reported smoking every day or some days for the States was 22.8.



States

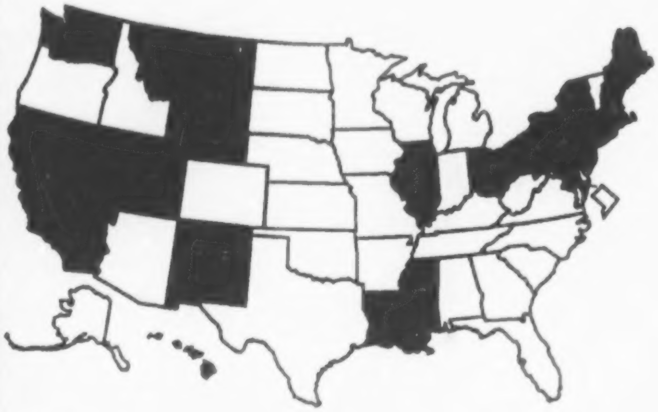
■ 1	Based on the BRFSS data, one State attained the national target for the year 2000 in both 1998 and 1999.
☐ 48	In 1999, 48 States had rates greater than the year 2000 target (15.0) and less than the 1987 baseline (29.0).
■ 2	In 1999 there were two States with rates greater than or equal to the 1987 baseline (29.0).

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure U. Objective 4.1–Alcohol-related motor vehicle crash deaths per 100,000 population: United States and each State, 1997 and 1998

	Death rate per 100,000		Target status (5.5)
	1997	1998	
United States	6.0	5.9	□
Alabama	10.9	9.3	□
Alaska	6.7	5.0	□
Arizona	9.5	9.1	□
Arkansas	7.6	7.6	□
California	4.1	4.1	■
Colorado	5.6	5.8	□
Connecticut	4.7	4.3	■
Delaware	8.3	6.1	□
District of Columbia	6.6	5.2	□
Florida	6.4	6.2	□
Georgia	7.7	6.7	□
Hawaii	4.9	4.7	■
Idaho	8.4	7.3	□
Illinois	4.9	5.0	■
Indiana	5.3	6.4	□
Iowa	6.1	5.7	□
Kansas	5.5	6.6	□
Kentucky	7.1	7.2	□
Louisiana	9.7	9.8	■
Maine	5.2	4.3	■
Maryland	4.3	4.0	■
Massachusetts	3.4	3.1	■
Michigan	5.7	5.5	□
Minnesota	4.1	5.9	□
Mississippi	12.6	12.8	■
Missouri	9.4	9.7	□
Montana	13.7	11.8	■
Nebraska	6.3	7.2	□
Nevada	9.5	10.1	■
New Hampshire	5.1	5.1	■
New Jersey	3.5	3.3	■
New Mexico	12.8	11.1	■
New York	2.5	2.0	■
North Carolina	7.1	6.8	□
North Dakota	7.8	6.9	□
Ohio	4.3	4.1	■
Oklahoma	9.1	7.5	□
Oregon	7.0	7.1	□
Pennsylvania	5.3	5.2	■
Rhode Island	4.2	3.5	■
South Carolina	8.4	7.9	□
South Dakota	8.3	9.1	□
Tennessee	9.2	9.2	□
Texas	9.0	9.1	□
Utah	3.6	2.4	■
Vermont	5.8	6.4	□
Virginia	5.7	5.1	□
Washington	5.3	5.4	■
West Virginia	8.0	8.0	□
Wisconsin	6.3	5.8	□
Wyoming	9.0	14.1	■

United States – The baseline rate for alcohol-related motor vehicle crash deaths in 1987 was 9.8. The rate in 1998 was 5.9. Ninety-three percent of the targeted change in rates was, therefore, achieved in 1998.



States

■ 15	Fifteen States attained the target in both 1997 and 1998.
□ 4	Four States attained the target in 1998 but not in 1997.
□ 26	In 1998, 26 States had rates greater than the year 2000 target (5.5) and less than the 1987 baseline (9.8).
■ 6	In 1998, there were six States with rates greater than or equal to the 1988 baseline (9.8).

SOURCE: Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System.

Figure W. Objective 4.6--Percent of youth who currently use marijuana: United States and each State, 1999

	Percent of youth
	1999
United States	7.7
Alabama	5.6
Alaska	10.5
Arizona	7.5
Arkansas	7.6
California	8.4
Colorado	10.8
Connecticut	9.3
Delaware	14.5
District of Columbia	10.3
Florida	6.6
Georgia	6.6
Hawaii	8.5
Idaho	6.3
Illinois	10.0
Indiana	9.6
Iowa	5.5
Kansas	7.1
Kentucky	5.8
Louisiana	7.0
Maine	8.0
Maryland	9.3
Massachusetts	12.9
Michigan	8.5
Minnesota	10.8
Mississippi	7.4
Missouri	7.4
Montana	11.5
Nebraska	6.8
Nevada	12.3
New Hampshire	11.7
New Jersey	8.2
New Mexico	9.9
New York	7.4
North Carolina	7.3
North Dakota	8.0
Ohio	7.6
Oklahoma	6.5
Oregon	10.0
Pennsylvania	7.3
Rhode Island	11.7
South Carolina	7.8
South Dakota	7.2
Tennessee	5.8
Texas	6.1
Utah	6.2
Vermont	8.8
Virginia	6.0
Washington	10.3
West Virginia	7.1
Wisconsin	9.0
Wyoming	8.0

United States – In 1999, based on data from the National Household Survey on Drug Abuse (NHSDA), 7.7 percent of youth ages 12-17 used marijuana during the past month.

The NHSDA has been used since 1988 to monitor trends in substance use among youth. A consistent methodology was used for monitoring national trends. The national estimates in table 4, Substance Abuse: Alcohol and other drugs, are based on this methodology. In 1999, the old methodology would produce an estimate of 7 percent of youth ages 12-17 using marijuana during the past month. The corresponding estimate based on the new methodology is 7.7 percent as shown here.

States – It is not appropriate to assess whether or not States attained the national target. The national trend data are based on a methodology that has been used since 1988 to monitor this objective. Data for States are available from the NHSDA for the first time for 1999. The State data are based on a new methodology that will be used to monitor trends from 1999 onward. Data for most States are derived through model-based estimation procedures (6). The 12 States with percentages of 12-17 year olds who reported using marijuana during the past month in the lowest quartile are shown below.

Iowa	5.5
Alabama	5.6
Kentucky	5.8
Tennessee	5.8
Virginia	6.0
Texas	6.1
Utah	6.2
Idaho	6.3
Oklahoma	6.5
Florida	6.6
Georgia	6.6
Nebraska	6.8

SOURCE: Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse.

Figure Y. Objective 4.6–Percent of youth who currently smoke cigarettes: United States and each State, 1999

	Percent of youth
	1999
United States (NHSDA)	14.9
Alabama	17.3
Alaska	16.6
Arizona	14.5
Arkansas	20.2
California	9.0
Colorado	15.7
Connecticut	16.0
Delaware	19.5
District of Columbia	10.7
Florida	11.5
Georgia	14.5
Hawaii	10.2
Idaho	13.1
Illinois	17.6
Indiana	18.3
Iowa	18.2
Kansas	15.7
Kentucky	23.9
Louisiana	16.9
Maine	16.7
Maryland	13.8
Massachusetts	16.7
Michigan	16.2
Minnesota	20.8
Mississippi	18.8
Missouri	16.7
Montana	19.8
Nebraska	14.1
Nevada	17.4
New Hampshire	15.1
New Jersey	11.9
New Mexico	15.3
New York	12.9
North Carolina	19.2
North Dakota	22.4
Ohio	18.1
Oklahoma	17.4
Oregon	15.2
Pennsylvania	17.5
Rhode Island	14.8
South Carolina	19.5
South Dakota	18.9
Tennessee	17.2
Texas	13.4
Utah	10.3
Vermont	14.7
Virginia	14.7
Washington	14.4
West Virginia	22.5
Wisconsin	18.2
Wyoming	15.9

United States – In 1999, based on data from the National Household Survey on Drug Abuse (NHDSA), 14.9 percent of youth ages 12-17 smoked cigarettes during the past month.

The NHSDA has been used since 1988 to monitor trends in substance use among youth. A consistent methodology was used for monitoring national trends. The national estimates in table 4, Substance Abuse: Alcohol and other drugs, are based on this methodology. In 1999, the old methodology would produce an estimate of 15.9 percent of youth ages 12-17 smoking cigarettes during the past month. The corresponding estimate based on the new methodology is 14.9 percent as shown here.

States – It is not appropriate to assess whether or not States attained the national target. The national trend data are based on a methodology that has been used since 1988 to monitor this objective. The State data are based on a new methodology that will be used to monitor trends from 1999 onward. Data for most States are derived through model-based estimation procedures (6). The 12 States with percentages of 12-17 year olds who reported smoking cigarettes during the past month in the lowest quartile are shown below.

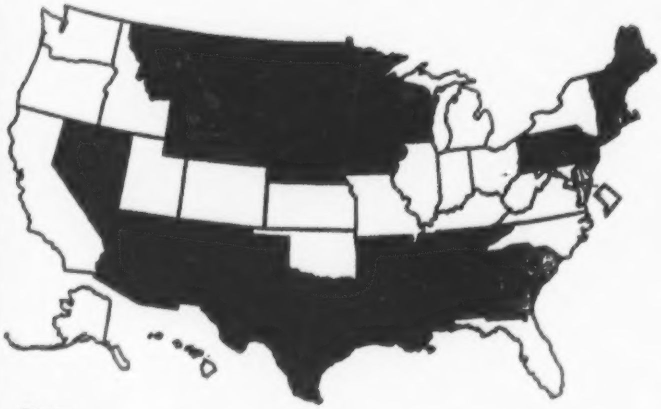
California	9.0
Hawaii	10.2
Utah	10.3
District of Columbia	10.7
Florida	11.5
New Jersey	11.9
New York	12.9
Idaho	13.1
Texas	13.4
Maryland	13.8
Nebraska	14.1
Washington	14.4

SOURCE: Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse.

Figure Z. Objective 5.1--Live birth rates for females 15-17 years old: United States and each State, 1997 and 1998.

	Live birth rates per 1,000 females ages 15-17		Target status (23.3)[1]
	1997	1998	
United States	32.1	30.4	
Alabama	43.4	40.7	■
Alaska	25.1	24.8	□
Arizona	44.0	45.2	■
Arkansas	42.9	41.4	■
California	36.2	33.4	□
Colorado	29.9	29.0	□
Connecticut	22.5	21.4	■
Delaware	36.8	33.9	□
District of Columbia	65.9	65.5	■
Florida	35.1	33.3	□
Georgia	44.0	40.3	■
Hawaii	25.3	29.5	□
Idaho	23.3	24.5	□
Illinois	34.4	32.7	□
Indiana	32.1	28.9	□
Iowa	20.1	18.6	■
Kansas	27.5	24.8	□
Kentucky	35.4	31.5	□
Louisiana	42.1	40.4	■
Maine	15.4	14.9	■
Maryland	28.2	26.4	□
Massachusetts	19.1	18.2	■
Michigan	25.4	23.9	□
Minnesota	17.8	16.5	■
Mississippi	50.2	47.2	■
Missouri	29.6	28.6	□
Montana	20.1	19.8	■
Nebraska	21.3	20.5	■
Nevada	42.2	38.2	■
New Hampshire	14.0	13.1	■
New Jersey	21.3	20.2	■
New Mexico	44.4	44.2	■
New York	23.4	22.4	□
North Carolina	37.7	36.2	□
North Dakota	14.3	16.1	■
Ohio	28.6	26.7	□
Oklahoma	37.3	35.0	□
Oregon	27.0	26.3	□
Pennsylvania	21.9	21.8	■
Rhode Island	27.6	24.4	□
South Carolina	40.0	39.6	■
South Dakota	21.8	19.6	■
Tennessee	38.5	37.7	■
Texas	47.1	45.2	■
Utah	23.7	22.2	□
Vermont	12.1	11.4	■
Virginia	26.1	24.3	□
Washington	24.5	23.2	□
West Virginia	27.5	26.2	□
Wisconsin	21.4	19.6	■
Wyoming	23.3	22.8	■

United States – The live birth rate for females 15-17 years old was 37.5 in 1990. The rate in 1998 was 30.4. Fifty percent of the change required to attain the target[1] for this part of Objective 5.1 had been achieved in 1998.



States

15	Fifteen States attained the target in both 1997 and 1998.
3	Three States attained the target in 1998 but not in 1997.
21	In 1998, 21 States had rates greater than the year 2000 target (23.3) and less than the 1990 baseline (37.5).
12	In 1998, 12 States had rates greater than 37.5, the baseline rate for the United States in 1990.

SOURCE: CDC, NCHS, National Vital Statistics System.

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[1] Objective 5.1 monitors the live birth rate for females 15-17 years old, however, there was no target specified. The target for the pregnancy rate for females 15-17 called for a 38 percent reduction from a baseline of 80.3 to a target of 50 live births per 1,000 women in the year 2000. Assuming that a similar 38 percent reduction would apply to each of the three components of the pregnancy rate (live births, fetal deaths, and abortions) a target was derived by reducing the live birth rate for females 15-17 in 1990 (37.5) by 38 percent. The resulting target is 23.3 live births per 1,000 females ages 15-17 in the year 2000.

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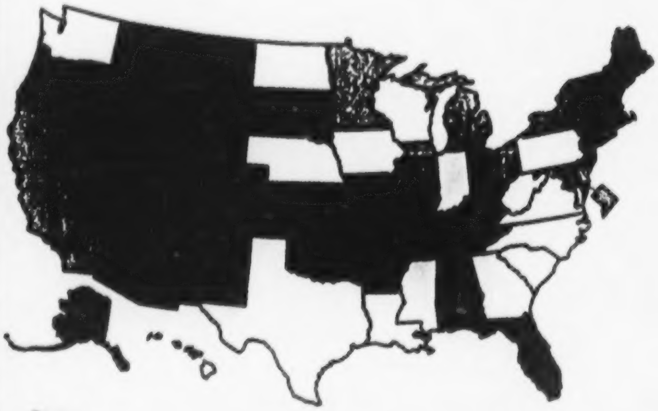
Figure AA. Objective 6.1–Age-adjusted death rates for suicide: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (10.5)
	1997	1998	
United States	10.6	10.4	□
Alabama	10.7	12.0	■
Alaska	21.3	22.1	■
Arizona	15.7	16.0	■
Arkansas	13.4	13.1	■
California	9.9	9.6	▨
Colorado	14.9	14.2	■
Connecticut	7.1	7.2	▨
Delaware	10.8	8.0	□
District of Columbia	7.0	7.3	▨
Florida	12.4	12.6	■
Georgia	11.2	10.0	□
Hawaii	11.0	9.2	□
Idaho	16.8	15.2	■
Illinois	7.1	8.1	▨
Indiana	11.6	11.1	□
Iowa	11.6	10.7	□
Kansas	11.7	11.9	■
Kentucky	11.3	11.8	■
Louisiana	11.6	10.4	□
Maine	10.1	14.5	■
Maryland	9.3	8.9	▨
Massachusetts	7.4	7.5	▨
Michigan	9.5	9.1	▨
Minnesota	9.4	9.4	▨
Mississippi	11.7	11.5	□
Missouri	12.1	12.1	■
Montana	19.7	16.3	■
Nebraska	10.0	11.6	□
Nevada	22.0	21.2	■
New Hampshire	10.6	12.7	■
New Jersey	6.6	6.4	▨
New Mexico	17.2	16.4	■
New York	7.1	6.9	▨
North Carolina	11.5	10.4	□
North Dakota	12.3	10.6	□
Ohio	9.3	9.0	▨
Oklahoma	14.3	13.1	■
Oregon	14.7	14.8	■
Pennsylvania	10.8	10.4	□
Rhode Island	7.1	8.1	▨
South Carolina	10.7	10.7	□
South Dakota	16.6	15.4	■
Tennessee	12.4	12.6	■
Texas	10.7	10.3	□
Utah	15.0	16.6	■
Vermont	10.9	12.9	■
Virginia	10.4	11.0	□
Washington	12.1	11.4	□
West Virginia	12.8	11.5	□
Wisconsin	10.3	10.7	□
Wyoming	18.4	18.8	■

United States – The age-adjusted suicide death rate for the United States was 11.7 per 100,000 population at baseline in 1987. In 1998 the rate (10.4) was lower than the target for the year 2000 (10.5). The United States, therefore, attained the target for objective 6.1.



States	
▨	Twelve States attained the target in both 1997 and 1998.
7	Seven States attained the target in 1998 but not in 1997.
10	In 1998, 10 States had rates greater than the year 2000 target (10.5) and less than the 1987 baseline (11.7).
22	In 1998, 22 States had age-adjusted suicide death rates greater than 11.7, the baseline rate for the United States in 1987.

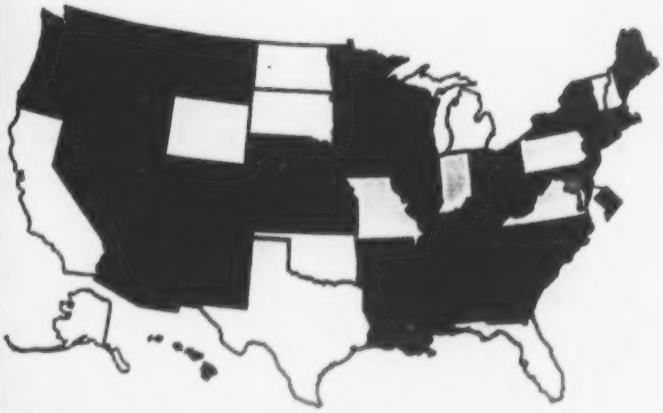
SOURCE: CDC, NCHS, National Vital Statistics System.

Figure BB. Objective 7.1--Age-adjusted death rates for homicide: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (7.2)
	1997	1998	
United States	7.8	7.1	□
Alabama	12.2	10.8	■
Alaska	8.6	7.8	□
Arizona	9.8	10.0	■
Arkansas	11.9	9.7	■
California	9.3	7.7	□
Colorado	4.6	5.1	■
Connecticut	4.6	5.0	■
Delaware	4.6	3.9	■
District of Columbia	61.5	44.6	■
Florida	8.4	7.9	□
Georgia	8.7	8.9	■
Hawaii	4.1	2.2	■
Idaho	3.5	2.7	■
Illinois	10.8	10.3	■
Indiana	7.7	7.2	□
Iowa	2.5	2.4	■
Kansas	6.5	6.5	■
Kentucky	6.8	6.4	■
Louisiana	17.0	14.4	■
Maine	2.1	2.3	■
Maryland	11.9	12.3	■
Massachusetts	2.5	2.3	■
Michigan	8.5	8.4	□
Minnesota	3.0	2.7	■
Mississippi	14.6	13.1	■
Missouri	8.4	8.4	□
Montana	4.6	3.2	■
Nebraska	3.9	3.6	■
Nevada	10.7	10.3	■
New Hampshire	2.2	*	□
New Jersey	5.1	4.4	■
New Mexico	9.7	9.9	■
New York	6.8	5.8	■
North Carolina	9.3	9.3	■
North Dakota	*	*	□
Ohio	4.6	4.2	■
Oklahoma	9.1	6.7	□
Oregon	4.2	4.4	■
Pennsylvania	7.4	6.0	□
Rhode Island	3.1	2.6	■
South Carolina	9.5	9.2	■
South Dakota	3.2	*	□
Tennessee	10.7	9.5	■
Texas	7.7	7.4	□
Utah	2.9	2.9	■
Vermont	*	*	□
Virginia	7.8	6.5	□
Washington	4.8	4.3	■
West Virginia	5.5	4.9	■
Wisconsin	4.3	3.9	■
Wyoming	4.7	*	□

*Figure does not meet standards of reliability or precision.

United States -- At baseline in 1987 the age-adjusted homicide death rate was 8.5 per 100,000. The age-adjusted homicide rate for the United States was 7.8 in 1997 and 7.1 in 1998. The target (7.2) was, therefore, attained for the first time in 1998.



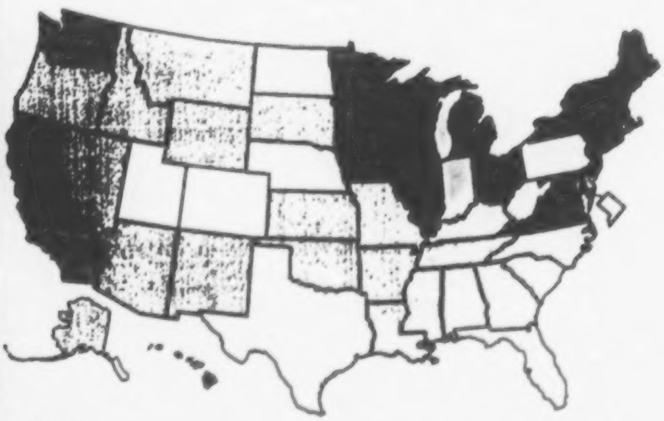
States	
■ 22	Twenty-two States attained the target in both 1997 and 1998.
□ 4	Four States attained the target in 1998 but not in 1997.
□ 6	In 1998, six States had rates greater than 7.2 (the year 2000 target) and less than the 1987 baseline (8.5).
■ 14	Fourteen States had rates greater than 8.5, the baseline rate for the United States in 1987.
□ 5	Homicide rates were based on too few cases to be considered reliable for these States in 1998.

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure CC. Objective 9.1--Age-adjusted death rates for unintentional injuries: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (29.3)
	1997	1998	
United States	30.1	30.1	□
Alabama	45.9	43.2	▨
Alaska	46.0	40.7	▨
Arizona	40.6	40.7	▨
Arkansas	46.0	42.3	▨
California	25.1	25.1	■
Colorado	31.6	32.6	□
Connecticut	23.9	24.5	■
Delaware	33.0	31.8	□
District of Columbia	24.6	31.5	□
Florida	32.1	33.3	□
Georgia	36.6	35.9	▨
Hawaii	23.9	21.0	■
Idaho	40.3	39.4	▨
Illinois	24.5	27.4	■
Indiana	29.8	30.7	□
Iowa	27.7	27.5	■
Kansas	31.9	34.9	▨
Kentucky	38.4	36.9	▨
Louisiana	39.3	39.9	▨
Maine	25.8	27.1	■
Maryland	22.0	22.2	■
Massachusetts	15.0	15.5	■
Michigan	27.2	27.2	■
Minnesota	26.2	26.4	■
Mississippi	50.9	54.4	▨
Missouri	36.4	35.8	▨
Montana	45.4	42.1	▨
Nebraska	31.0	31.6	□
Nevada	36.5	35.1	▨
New Hampshire	21.1	23.3	■
New Jersey	23.9	21.7	■
New Mexico	52.4	51.2	▨
New York	22.3	20.4	■
North Carolina	35.2	36.9	▨
North Dakota	30.1	34.0	□
Ohio	24.7	24.9	■
Oklahoma	40.6	39.5	▨
Oregon	33.6	34.9	▨
Pennsylvania	31.2	29.2	□
Rhode Island	19.0	17.3	■
South Carolina	40.2	41.1	▨
South Dakota	34.4	39.8	▨
Tennessee	39.8	41.0	▨
Texas	33.5	33.7	□
Utah	30.4	30.6	□
Vermont	24.6	29.2	■
Virginia	28.2	27.7	■
Washington	28.6	28.5	■
West Virginia	35.4	37.1	▨
Wisconsin	27.3	27.7	■
Wyoming	45.1	42.4	▨

United States --The age-adjusted death rate for unintentional injuries was 34.7 at baseline in 1987. The United States had not attained the objective in 1998. However, 85 percent of the targeted change had been achieved.



States

■ 19	Nineteen States attained the target in both 1997 and 1998.
□ 1	One State attained the target in 1998 but not in 1997.
□ 9	In 1998, nine States had rates greater than the year 2000 target (29.3) and less than the 1987 baseline (34.7).
▨ 22	In 1998, there were 22 States with rates greater than or equal to the 1987 baseline (34.7).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure DD. Objective 9.12--Percent of persons wearing a safety belt while driving or riding in a car: United States and each State, 1995 and 1997

	Percent of persons		Target status (85.0)
	1995	1997	
United States (NOPUS)	69.0[1]	67.0[2]	
Median of States (BRFSS)	66.7	69.3	
Alabama	67.4	66.2	
Alaska	66.3	65.3	
Arizona	74.0	80.5	
Arkansas	67.2	65.5	
California	85.1	87.2	■
Colorado	64.4	71.4	
Connecticut	69.0	69.1	
Delaware	70.9	69.9	
District of Columbia	—	78.0	
Florida	75.6	76.1	
Georgia	63.9	75.4	
Hawaii	87.3	87.1	■
Idaho	57.4	59.6	
Illinois	69.1	68.1	
Indiana	56.5	61.9	
Iowa	62.7	67.2	
Kansas	57.6	53.8	
Kentucky	65.2	65.4	
Louisiana	67.1	74.3	
Maine	51.2	69.5	
Maryland	74.5	76.1	
Massachusetts	58.0	62.7	
Michigan	70.3	72.3	
Minnesota	58.7	59.7	
Mississippi	58.1	56.5	
Missouri	63.8	61.9	
Montana	56.6	57.6	
Nebraska	53.0	57.7	
Nevada	71.5	73.7	
New Hampshire	52.9	58.2	
New Jersey	68.3	72.2	
New Mexico	84.4	83.5	
New York	73.4	73.8	
North Carolina	85.9	84.7	
North Dakota	41.5	40.2	▨
Ohio	68.2	70.0	
Oklahoma	54.0	63.1	
Oregon	82.8	84.0	
Pennsylvania	60.7	67.3	
Rhode Island	50.0	56.8	
South Carolina	76.8	80.5	
South Dakota	43.0	42.0	▨
Tennessee	61.5	66.4	
Texas	77.6	81.2	
Utah	60.2	65.0	
Vermont	71.1	73.7	
Virginia	72.2	71.7	
Washington	77.9	75.8	
West Virginia	69.9	70.8	
Wisconsin	56.1	61.3	
Wyoming	47.7	50.2	

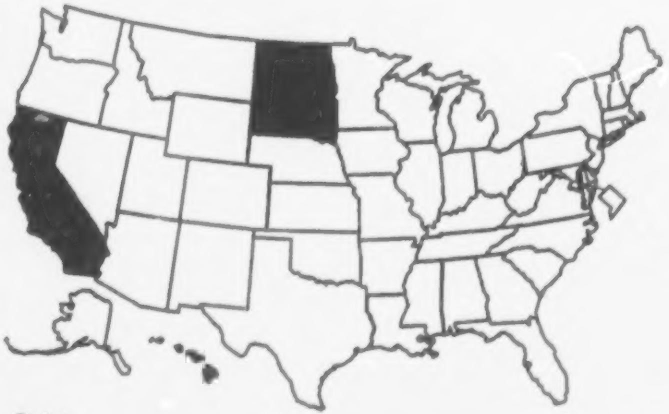
—Data not available.

[1] 1998 data.

[2] 1999 data.

United States -- In 1999, based on the National Occupant Protection Use Survey (NOPUS), 67.0 percent of persons were observed to be using seat belts. At the baseline in 1988, 42 percent of persons were observed to be using seat belts. The United States had, therefore, achieved 58 percent of the change required to meet the year 2000 target for objective 9.12 (85 percent).

In 1997, based on the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of persons 18 and older who reported that they always use seat belts when they drive or ride in a car for the States was 69.3. These data are limited to persons 18 and older--a part of the overall target population.



States

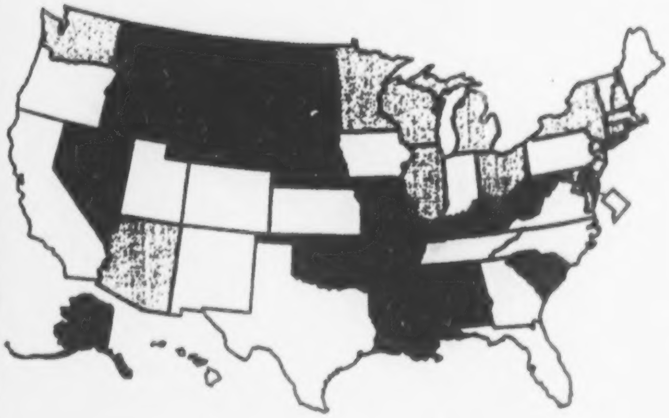
■ 2	Based on BRFSS data, two States attained the national target in two consecutive surveys, 1995 and 1997.
☐ 47	In 1997, 47 States had rates less than the year 2000 target (85) and greater than the 1987 baseline (42).
▨	In 1997, there were two States with rates less than or equal to the 1988 baseline (42).

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure EE. Objective 10.1--Work-related injury death rates: United States and each State, 1998 and 1999

	Death rate per 100,000 workers[1]		Target status
	1998	1999	(4.0)
United States	4.5	4.5	□
Alabama	6.5	6.0	■
Alaska	14.4	14.2	■
Arizona	3.4	3.1	▨
Arkansas	7.5	6.5	■
California	4.1	3.8	□
Colorado	3.6	4.5	□
Connecticut	3.5	2.3	▨
Delaware	2.9	3.7	▨
District of Columbia	5.3	5.3	□
Florida	5.5	4.9	□
Georgia	5.3	5.8	□
Hawaii	2.2	5.7	□
Idaho	8.2	6.9	■
Illinois	3.6	3.4	▨
Indiana	5.2	5.7	□
Iowa	4.5	5.2	□
Kansas	7.2	5.8	□
Kentucky	6.4	6.4	■
Louisiana	8.2	7.2	■
Maine	4.2	5.0	□
Maryland	3.0	3.1	▨
Massachusetts	1.4	2.6	▨
Michigan	3.7	3.7	▨
Minnesota	3.4	2.7	▨
Mississippi	9.4	10.6	■
Missouri	5.3	6.0	■
Montana	13.2	10.9	■
Nebraska	6.3	7.3	■
Nevada	6.8	6.3	■
New Hampshire	3.6	2.2	▨
New Jersey	2.6	2.6	▨
New Mexico	6.2	5.1	□
New York	2.9	2.9	▨
North Carolina	6.2	5.9	□
North Dakota	7.2	6.8	■
Ohio	3.4	4.0	▨
Oklahoma	4.9	6.2	■
Oregon	4.3	4.2	□
Pennsylvania	4.2	3.9	□
Rhode Island	2.5	2.3	▨
South Carolina	5.9	7.4	■
South Dakota	7.3	11.6	■
Tennessee	5.7	5.7	□
Texas	5.4	4.8	□
Utah	6.6	5.2	□
Vermont	5.0	4.3	□
Virginia	5.2	4.5	□
Washington	3.9	3.0	▨
West Virginia	7.7	7.5	■
Wisconsin	3.4	3.7	▨
Wyoming	13.5	12.9	■

United States -- The baseline for the work-related injury death rate was 6.0 for 1983-87. The rate was 4.5 in both 1988 and 1999. Seventy-five percent of the targeted change for the year 2000 had, therefore, been achieved.



States

▨ 15 Fifteen States attained the target in two consecutive years, 1998 and 1999.

□ 2 Two States attained the target only in 1999.

□ 17 Seventeen States had rates in 1999 greater than the target and less than the baseline (6.0).

■ 17 In 1999, 17 States had rates greater than or equal to the baseline for the United States in 1983-87 (6.0).

SOURCE: Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

[1] The rates for the United States were calculated based on denominators that were adjusted to include military personnel. The rates for States were calculated without any adjustment for military personnel. The rates for States are, therefore, overestimates and comparisons among States may be affected by differences in the proportion of military personnel.

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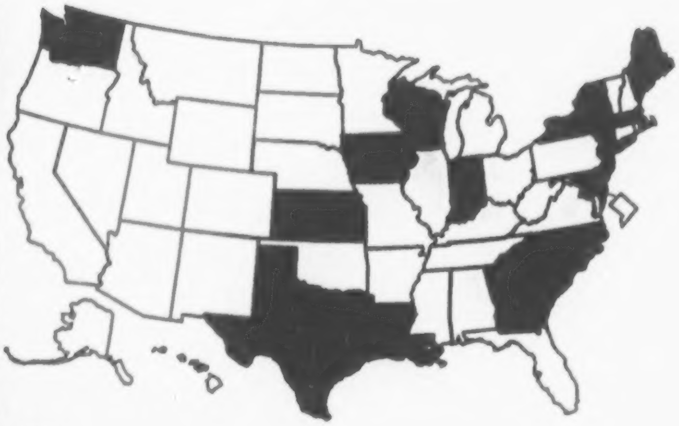
Figure FF. Objective 10.2–Nonfatal work-related injuries per 100 full-time workers in private industry: United States and reporting States, 1997 and 1998

	Nonfatal injury rate per 100 full-time workers		Target status (6.0)
	1997	1998	
United States	6.6	6.2	□
Alabama	7.5	6.9	□
Alaska	7.9	7.2	□
Arizona	6.2	5.9	□
Arkansas	7.0	6.4	□
California	6.2	5.9	□
Colorado	---	---	□
Connecticut	6.2	6.2	□
Delaware	5.3	5.1	■
District of Columbia	---	---	□
Florida	6.3	5.7	□
Georgia	5.1	5.4	■
Hawaii	6.6	6.3	□
Idaho	---	---	□
Illinois	---	6.6	□
Indiana	8.4	7.8	■
Iowa	8.5	8.0	■
Kansas	7.8	7.7	■
Kentucky	8.5	7.6	□
Louisiana	4.7	4.9	■
Maine	7.1	7.8	■
Maryland	5.0	4.8	■
Massachusetts	5.4	5.5	■
Michigan	8.0	7.5	□
Minnesota	6.9	7.0	□
Mississippi	---	---	□
Missouri	7.1	7.0	□
Montana	7.6	7.4	□
Nebraska	8.3	7.6	□
Nevada	7.7	7.1	□
New Hampshire	---	---	□
New Jersey	5.7	4.7	■
New Mexico	6.2	6.0	□
New York	4.2	4.0	■
North Carolina	5.9	5.7	■
North Dakota	---	---	□
Ohio	---	---	□
Oklahoma	6.7	7.0	□
Oregon	7.2	6.5	□
Pennsylvania	---	---	□
Rhode Island	7.5	6.5	□
South Carolina	5.7	5.5	■
South Dakota	---	---	□
Tennessee	7.0	7.0	□
Texas	5.2	4.9	■
Utah	7.8	7.2	□
Vermont	6.3	6.6	□
Virginia	6.1	5.4	□
Washington	9.1	8.7	■
West Virginia	—	7.4	□
Wisconsin	9.0	8.5	■
Wyoming	---	---	□

—Data not available.

United States –The baseline for nonfatal work-related injuries per 100 full-time workers in private industry was 7.7 for 1983-87. In 1998, the comparable rate was 6.2. The United States had achieved 88 percent of the change required to meet the year 2000 target.



States

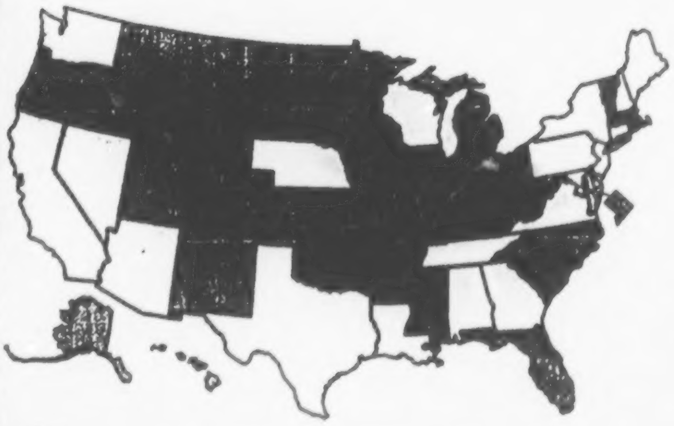
■ 10	Ten States attained the target in both 1997 and 1998.
□ 5	Five States attained the target only in 1998.
□ 20	In 1998, 20 States had rates greater than the year 2000 target (6.0) and less than the 1987 baseline (7.7).
■ 6	In 1998 there were six States with rates greater than or equal to the 1983-87 baseline (7.7).
□ 10	There were no data for 10 States.

SOURCE: Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses.

Figure GG. Objective 11.5--Percent of persons in counties that have not exceeded the Environmental Protection Agency (EPA) standards for air quality: United States and each State, 1997 and 1998

	Percent in counties not exceeding EPA air quality standards		Target status (85.0)
	1997	1998	
United States	78.9	76.5	
Alabama	100.0	72.1	
Alaska	85.9	85.9	▨
Arizona	42.1	42.1	
Arkansas	100.0	100.0	▨
California	42.6	16.4	
Colorado	99.7	100.0	▨
Connecticut	8.4	46.5	
Delaware	16.7	17.0	
District of Columbia	100.0	100.0	▨
Florida	100.0	91.6	▨
Georgia	60.8	70.3	
Hawaii	100.0	100.0	▨
Idaho	99.3	100.0	▨
Illinois	97.8	97.8	▨
Indiana	97.3	95.3	▨
Iowa	100.0	88.2	▨
Kansas	100.0	100.0	▨
Kentucky	99.1	98.8	▨
Louisiana	63.2	90.5	
Maine	64.1	96.2	
Maryland	38.3	72.1	
Massachusetts	90.0	100.0	▨
Michigan	100.0	90.6	▨
Minnesota	100.0	100.0	▨
Mississippi	100.0	100.0	▨
Missouri	94.4	89.5	▨
Montana	100.0	100.0	▨
Nebraska	73.6	100.0	
Nevada	38.1	38.1	
New Hampshire	77.8	100.0	
New Jersey	62.0	87.3	
New Mexico	100.0	100.0	▨
New York	79.7	82.3	
North Carolina	98.3	89.6	▨
North Dakota	100.0	100.0	▨
Ohio	100.0	98.1	▨
Oklahoma	100.0	100.0	▨
Oregon	100.0	90.2	▨
Pennsylvania	61.6	74.7	
Rhode Island	100.0	100.0	▨
South Carolina	100.0	91.0	▨
South Dakota	100.0	100.0	▨
Tennessee	87.2	66.9	
Texas	54.6	69.2	
Utah	100.0	100.0	▨
Vermont	100.0	100.0	▨
Virginia	96.2	83.5	
Washington	100.0	57.0	
West Virginia	100.0	92.6	▨
Wisconsin	76.8	74.2	
Wyoming	100.0	100.0	▨

United States – The percent of persons living in counties that did not exceed EPA Air Quality Standards at baseline in 1988 was 49.7. In 1998, the comparable percent was 76.5, although the percent had been higher in intervening years. Based on the estimate for 1998, the United States had achieved about 76 percent of the targeted improvement in the percent of persons in counties that have not exceeded EPA air quality standards. The air quality data should be interpreted with caution because they are subject to the effects of weather patterns.



States

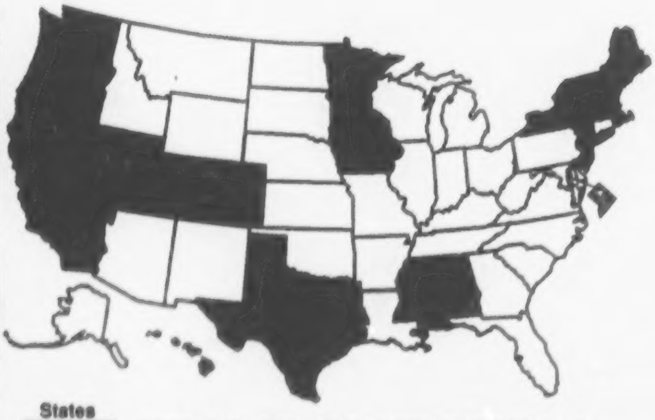
▨ 31	Thirty-one States attained the target in both 1997 and 1998.
5	Five States attained the target only in 1998.
10	In 1998, there were 10 States with percents greater than the national baseline (49.7) and less than the year 2000 target (85.0).
5	In 1998, five States had percents less than or equal to the baseline for the United States in 1988 (49.7).

SOURCE: Environmental Protection Agency, AIRS, OAR, National Air Quality and Emissions Trends Report.

Figure HH. Objective 14.1--Infant mortality rates: United States and each State, 1997 and 1998

	Infant deaths per 1,000 live births		Target status (7.0)
	1997	1998	
United States	7.2	7.2	□
Alabama	9.5	10.2	▨
Alaska	7.5	5.9	□
Arizona	7.1	7.5	□
Arkansas	8.7	8.9	□
California	5.9	5.8	■
Colorado	7.0	6.7	■
Connecticut	7.2	7.0	□
Delaware	7.8	9.6	□
District of Columbia	13.2	12.5	▨
Florida	7.1	7.2	□
Georgia	8.6	8.5	□
Hawaii	6.6	6.9	■
Idaho	6.8	7.2	□
Illinois	8.4	8.4	□
Indiana	8.2	7.6	□
Iowa	6.2	6.6	■
Kansas	7.4	7.0	□
Kentucky	7.3	7.5	□
Louisiana	9.5	9.1	□
Maine	5.1	6.3	■
Maryland	8.8	8.6	□
Massachusetts	5.2	5.1	■
Michigan	8.2	8.2	□
Minnesota	5.9	5.9	■
Mississippi	10.6	10.1	▨
Missouri	7.6	7.7	□
Montana	6.9	7.4	□
Nebraska	7.4	7.3	□
Nevada	6.5	7.0	■
New Hampshire	4.3	4.4	■
New Jersey	6.3	6.4	■
New Mexico	6.1	7.2	□
New York	6.7	6.3	■
North Carolina	9.2	9.3	□
North Dakota	6.2	8.6	□
Ohio	7.8	8.0	□
Oklahoma	7.5	8.5	□
Oregon	5.8	5.4	■
Pennsylvania	7.6	7.1	□
Rhode Island	7.0	7.0	■
South Carolina	9.6	9.6	□
South Dakota	7.7	9.1	□
Tennessee	8.6	8.2	□
Texas	6.4	6.4	■
Utah	5.8	5.6	■
Vermont	6.1	7.0	■
Virginia	7.8	7.7	□
Washington	5.6	5.7	■
West Virginia	9.6	8.0	□
Wisconsin	6.5	7.2	□
Wyoming	5.8	7.2	□

United States --The infant mortality rate at baseline in 1987 was 10.1 infant deaths per 1,000 live births. The rate in 1997 and 1998 was 7.2. The United States has, therefore, achieved 94 percent of the targeted reduction in infant mortality rates.



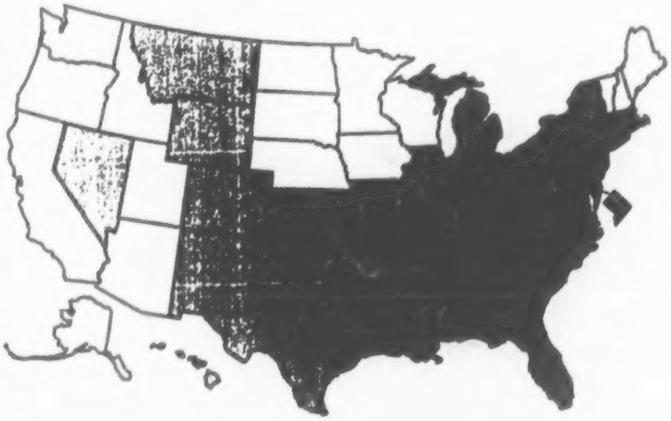
States	
■ 17	Seventeen States attained the target in 1997 and 1998.
□ 3	Three States attained the target only in 1998.
□ 28	In 1998, 28 States had rates greater than the year 2000 target (7.0) and less than the 1987 baseline (10.1).
▨ 3	In 1998, there were three States with rates greater than or equal to the 1987 baseline (10.1).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure JJ. Objective 14.5–Percent of live births of low birthweight: United States and each State, 1997 and 1998

	Percent low birthweight		Target status (5.0)
	1997	1998	
United States	7.5	7.6	
Alabama	9.2	9.3	
Alaska	5.9	6.0	
Arizona	6.9	6.8	
Arkansas	8.4	8.9	
California	6.2	6.2	
Colorado	8.8	8.6	
Connecticut	7.3	7.8	
Delaware	8.7	8.4	
District of Columbia	13.4	13.1	
Florida	8.0	8.1	
Georgia	8.8	8.5	
Hawaii	7.2	7.5	
Idaho	6.3	6.0	
Illinois	7.9	8.0	
Indiana	7.7	7.9	
Iowa	6.4	6.4	
Kansas	6.9	7.0	
Kentucky	7.8	8.1	
Louisiana	10.2	10.1	
Maine	5.9	5.8	
Maryland	8.8	8.7	
Massachusetts	7.0	6.9	
Michigan	7.7	7.8	
Minnesota	5.9	5.8	
Mississippi	10.1	10.1	
Missouri	7.7	7.8	
Montana	6.3	7.0	
Nebraska	7.0	6.5	
Nevada	7.6	7.6	
New Hampshire	5.8	5.7	
New Jersey	7.9	8.0	
New Mexico	7.8	7.6	
New York	7.8	7.8	
North Carolina	8.8	8.8	
North Dakota	6.2	6.5	
Ohio	7.7	7.7	
Oklahoma	7.3	7.2	
Oregon	5.5	5.4	
Pennsylvania	7.6	7.6	
Rhode Island	7.4	7.6	
South Carolina	9.2	9.5	
South Dakota	5.5	5.8	
Tennessee	8.8	9.1	
Texas	7.3	7.4	
Utah	6.6	6.7	
Vermont	6.3	6.5	
Virginia	7.7	7.9	
Washington	5.6	5.7	
West Virginia	8.3	8.0	
Wisconsin	6.4	6.5	
Wyoming	9.0	8.9	

United States – The target for this objective has not been attained. The percent low birthweight was 7.5 in 1998. The percent low birthweight has risen steadily since 1987 when the baseline was 6.9 percent.



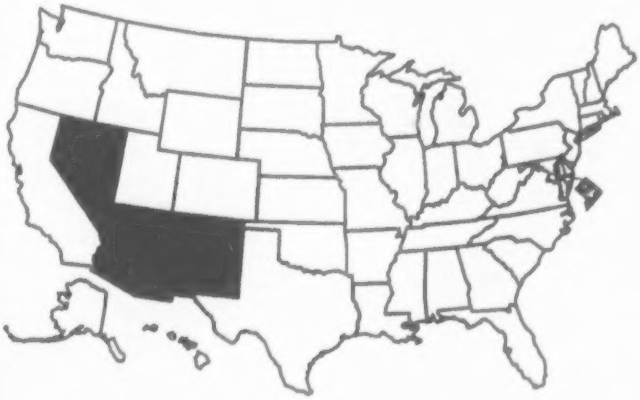
States	
16	In 1998, 16 States had rates greater than the year 2000 target (5.0) and less than the 1987 baseline (6.9).
35	In 1998, there were 35 States with rates greater than or equal to the 1987 baseline (6.9).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure KK. Objective 14.11–Percent of mothers who began prenatal care in the first trimester: United States and each State, 1997 and 1998

	Percent beginning care in first trimester		Target status (90.0)
	1997	1998	
United States	82.5	82.8	
Alabama	82.2	82.4	
Alaska	80.4	81.4	
Arizona	75.4	75.1	■
Arkansas	75.7	77.8	
California	81.8	82.4	
Colorado	82.9	82.2	
Connecticut	89.2	88.0	
Delaware	82.5	83.4	
District of Columbia	66.6	72.0	■
Florida	83.9	83.6	
Georgia	85.8	86.4	
Hawaii	83.4	85.4	
Idaho	78.6	78.7	
Illinois	82.4	82.7	
Indiana	80.1	79.9	
Iowa	87.4	87.3	
Kansas	85.6	85.8	
Kentucky	85.8	86.4	
Louisiana	81.3	82.2	
Maine	88.9	88.9	
Maryland	88.8	87.8	
Massachusetts	88.9	89.5	
Michigan	84.2	84.3	
Minnesota	84.1	84.5	
Mississippi	80.1	80.6	
Missouri	86.0	86.1	
Montana	82.6	82.3	
Nebraska	83.9	83.9	
Nevada	76.1	74.6	■
New Hampshire	89.6	89.7	
New Jersey	81.3	81.6	
New Mexico	70.2	67.6	■
New York	80.6	81.2	
North Carolina	83.9	84.5	
North Dakota	84.8	85.6	
Ohio	85.1	85.5	
Oklahoma	78.5	78.6	
Oregon	81.1	80.2	
Pennsylvania	83.8	84.8	
Rhode Island	89.5	89.7	
South Carolina	80.5	81.4	
South Dakota	82.1	82.7	
Tennessee	83.7	84.1	
Texas	78.5	79.3	
Utah	83.7	82.1	
Vermont	88.0	87.4	
Virginia	85.1	85.2	
Washington	83.3	83.0	
West Virginia	82.0	83.7	
Wisconsin	84.6	84.3	
Wyoming	82.5	81.3	

United States -- The United States has achieved about 49 percent of the targeted change in the percent of women beginning prenatal care in the first trimester of pregnancy. The baseline in 1987 was 76 percent.



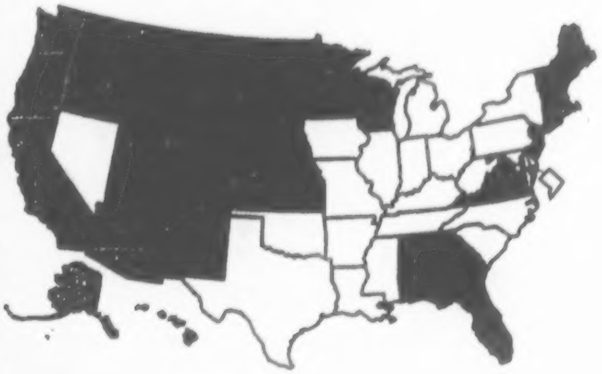
States	
□ 47	In 1998, 47 States had rates between the year 2000 target (90.0) and the 1987 baseline (76.0).
■ 4	In 1998, there were four States with rates lower than the 1987 baseline (76.0).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure LL. Objective 15.1--Age-adjusted death rates for coronary heart disease: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (100.0)
	1997	1998	
United States	100.1	96.8	
Alabama	92.3	88.8	■
Alaska	67.2	70.0	■
Arizona	87.1	86.3	■
Arkansas	108.4	106.4	
California	95.4	94.3	■
Colorado	69.5	66.4	■
Connecticut	87.3	83.2	■
Delaware	109.5	98.0	
District of Columbia	112.6	125.1	
Florida	97.9	97.4	■
Georgia	97.8	95.5	■
Hawaii	65.2	62.6	■
Idaho	80.1	71.3	■
Illinois	103.1	101.3	
Indiana	102.0	97.9	
Iowa	101.7	97.5	
Kansas	82.8	80.4	■
Kentucky	113.5	106.3	
Louisiana	115.5	113.9	
Maine	96.5	89.3	■
Maryland	100.1	97.1	
Massachusetts	80.1	75.1	■
Michigan	111.6	109.1	
Minnesota	67.3	63.8	■
Mississippi	129.4	128.2	
Missouri	110.7	108.0	
Montana	75.3	69.5	■
Nebraska	75.1	68.0	■
Nevada	101.8	101.9	
New Hampshire	94.9	93.9	■
New Jersey	97.3	94.4	■
New Mexico	78.9	75.3	■
New York	122.6	114.7	
North Carolina	104.9	100.9	
North Dakota	87.6	80.2	■
Ohio	106.5	103.4	
Oklahoma	119.2	115.9	
Oregon	77.0	72.3	■
Pennsylvania	101.6	96.0	
Rhode Island	108.3	101.6	
South Carolina	106.8	101.8	
South Dakota	87.4	84.4	■
Tennessee	126.3	123.2	
Texas	106.4	100.9	
Utah	64.1	58.8	■
Vermont	95.2	82.9	■
Virginia	87.9	87.0	■
Washington	78.8	79.3	■
West Virginia	119.4	119.6	
Wisconsin	85.1	84.3	■
Wyoming	83.0	82.0	■

United States – The United States attained the Year 2000 target (an age-adjusted rate of 100 coronary heart disease deaths per 100,000 population) for the first time in 1998. The baseline in 1987 was an age-adjusted rate of 135 deaths per 100,000.



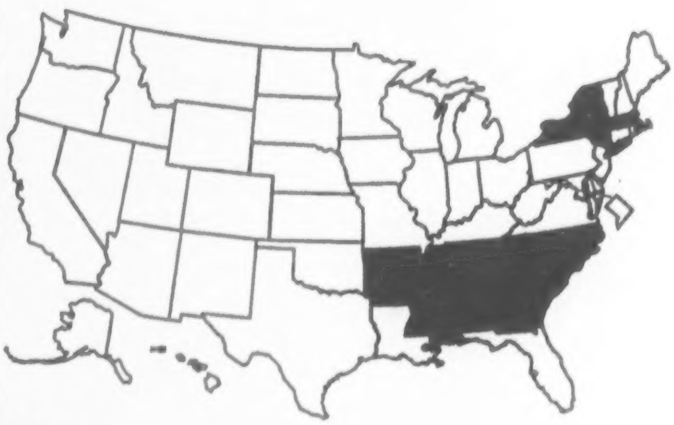
States	
■ 28	Twenty-eight States attained the target in 1997 and 1998.
5	Five States attained the target in 1998 but not in 1997.
18	In 1998, eighteen States had rates greater than the year 2000 target (100.0) and less than the 1987 baseline (135.0).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure MM. Objective 15.2--Age-adjusted death rates for stroke: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (20.0)
	1997	1998	
United States	25.8	25.1	
Alabama	31.1	30.6	■
Alaska	22.7	25.2	
Arizona	23.3	22.5	
Arkansas	38.2	35.3	■
California	25.9	25.0	
Colorado	22.2	21.8	
Connecticut	20.5	20.9	
Delaware	22.0	23.2	
District of Columbia	31.2	28.4	
Florida	22.3	22.0	
Georgia	34.0	31.6	■
Hawaii	28.2	24.1	
Idaho	25.5	24.7	
Illinois	26.2	25.4	
Indiana	27.9	28.1	
Iowa	23.1	23.1	
Kansas	23.2	24.7	
Kentucky	27.8	27.6	
Louisiana	30.0	30.0	
Maine	23.0	22.6	
Maryland	25.2	25.1	
Massachusetts	19.9	18.6	■
Michigan	26.2	25.9	
Minnesota	24.4	21.9	
Mississippi	35.1	33.4	■
Missouri	26.2	27.3	
Montana	23.7	23.2	
Nebraska	22.9	25.2	
Nevada	26.0	25.3	
New Hampshire	24.4	20.5	
New Jersey	21.2	21.1	
New Mexico	21.5	19.6	
New York	19.2	18.3	■
North Carolina	32.0	33.1	■
North Dakota	23.6	22.5	
Ohio	25.6	24.3	
Oklahoma	28.5	27.7	
Oregon	28.9	29.0	
Pennsylvania	24.4	23.5	
Rhode Island	23.1	20.0	
South Carolina	38.7	37.0	■
South Dakota	25.4	24.3	
Tennessee	33.5	32.6	■
Texas	27.8	26.4	
Utah	24.3	22.0	
Vermont	23.7	23.2	
Virginia	29.7	27.2	
Washington	28.5	28.6	
West Virginia	25.0	24.7	
Wisconsin	26.3	26.0	
Wyoming	21.4	26.2	

United States --The United States has achieved about half (51 percent) of the targeted reduction in stroke deaths. The baseline in 1987 was an age-adjusted stroke death rate of 30.4 and the comparable rate in 1998 was 25.1.



States

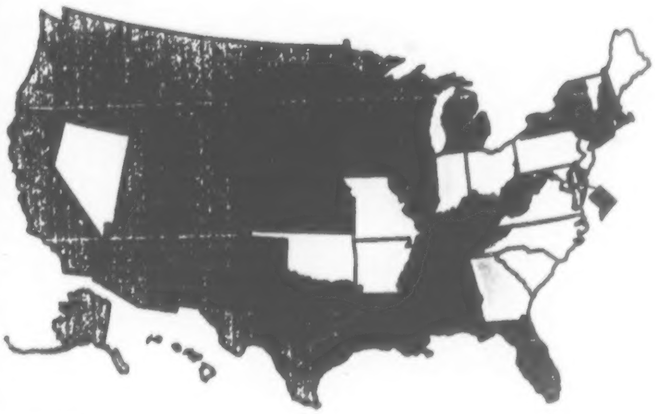
■ 2	Two States attained the target in 1997 and 1998.
☐ 2	Two States attained the target only in 1998.
☐ 40	Forty States had rates between the year 2000 target (20.0) and the 1987 baseline (30.4) in 1998.
■ 7	In 1998, seven States had rates greater than the baseline for the United States in 1987 (30.4).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure NN. Objective 16.1--Age-adjusted death rates for all cancers: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (130.0)
	1997	1998	
United States	125.4	123.5	▨
Alabama	136.0	135.6	■
Alaska	116.4	116.6	▨
Arizona	113.1	110.6	▨
Arkansas	138.6	133.2	☐
California	114.3	110.6	▨
Colorado	101.4	101.9	▨
Connecticut	120.3	119.1	▨
Delaware	141.5	138.9	■
District of Columbia	154.9	154.3	■
Florida	125.6	122.6	▨
Georgia	131.8	129.8	☐
Hawaii	95.0	100.5	▨
Idaho	107.4	110.4	▨
Illinois	129.6	128.4	▨
Indiana	130.4	133.4	☐
Iowa	116.5	117.3	▨
Kansas	118.0	112.9	▨
Kentucky	145.7	141.9	■
Louisiana	146.4	143.9	■
Maine	135.9	130.8	☐
Maryland	133.8	131.3	☐
Massachusetts	126.5	126.1	▨
Michigan	127.2	124.7	▨
Minnesota	115.3	112.6	▨
Mississippi	141.1	141.3	■
Missouri	131.1	132.9	☐
Montana	114.1	112.2	▨
Nebraska	112.4	114.0	▨
Nevada	128.5	133.9	☐
New Hampshire	134.8	134.3	■
New Jersey	130.2	126.8	☐
New Mexico	108.0	104.2	▨
New York	122.4	119.7	▨
North Carolina	130.6	128.6	☐
North Dakota	107.2	113.3	▨
Ohio	131.8	131.5	☐
Oklahoma	130.2	126.4	☐
Oregon	121.2	123.4	▨
Pennsylvania	131.4	127.7	☐
Rhode Island	136.3	132.0	☐
South Carolina	133.4	130.5	☐
South Dakota	116.5	116.7	▨
Tennessee	139.9	138.9	■
Texas	122.7	120.2	▨
Utah	84.6	93.5	▨
Vermont	131.4	124.9	☐
Virginia	130.2	126.8	☐
Washington	117.9	117.8	▨
West Virginia	140.3	139.1	■
Wisconsin	119.5	121.3	▨
Wyoming	113.5	112.3	▨

United States -- The age-adjusted death rate for all cancers in 1987 was 134 per 100,000. The rate in 1998 was 123.5. The United States has, therefore, achieved the target of 130 cancer deaths per 100,000.



States

▨ 26 Twenty-six States attained the target in 1997 and 1998.

☐ 7 Seven States attained the target only in 1998.

☐ 9 Nine States had rates between the year 2000 target (130) and the 1987 baseline (134).

■ 9 Nine States had rates in 1998 higher than the baseline for the United States in 1987 (134).

SOURCE: CDC, NCHS, National Vital Statistics System.

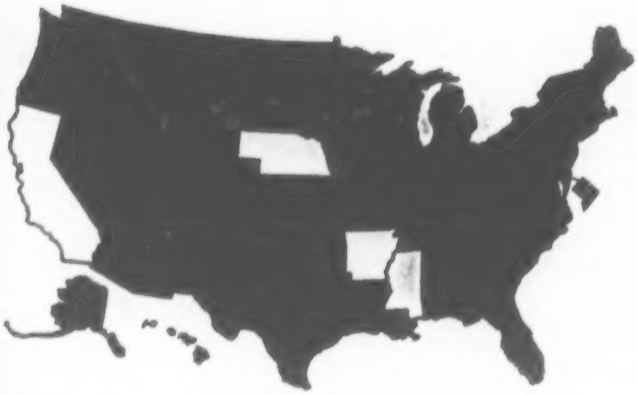
Figure OO. Objective 16.11–Percent of women 50 years of age and older who received a mammogram and breast exam within the last 2 years: United States and each State, 1998 and 1999

	Percent of women 50 years and older		Target status (60.0)
	1998	1999	
United States (NHIS)	64.0	---	□
Median of States (BRFSS)	67.8	68.5	■
Alabama	69.9	65.3	■
Alaska	74.1	73.1	■
Arizona	81.0	76.9	■
Arkansas	57.0	61.1	□
California	69.4	---	□
Colorado	70.1	66.1	■
Connecticut	69.4	77.8	■
Delaware	77.1	77.2	■
District of Columbia	85.2	78.2	■
Florida	68.9	76.1	■
Georgia	64.1	66.2	■
Hawaii	69.7	69.5	■
Idaho	63.5	63.2	■
Illinois	62.1	67.9	■
Indiana	63.9	60.7	■
Iowa	64.0	68.7	■
Kansas	66.3	71.5	■
Kentucky	63.7	68.3	■
Louisiana	63.5	65.0	■
Maine	73.6	80.1	■
Maryland	70.7	75.6	■
Massachusetts	74.8	77.7	■
Michigan	69.8	76.5	■
Minnesota	60.0	69.0	■
Mississippi	60.1	59.3	□
Missouri	66.6	64.9	■
Montana	69.0	66.4	■
Nebraska	59.5	68.9	□
Nevada	62.4	64.7	■
New Hampshire	71.6	80.4	■
New Jersey	65.1	68.0	■
New Mexico	66.3	66.3	■
New York	68.7	71.0	■
North Carolina	74.1	76.9	■
North Dakota	68.3	71.3	■
Ohio	68.1	71.0	■
Oklahoma	62.5	64.7	■
Oregon	67.8	69.3	■
Pennsylvania	66.5	67.9	■
Rhode Island	70.2	74.8	■
South Carolina	66.9	72.6	■
South Dakota	69.5	68.2	■
Tennessee	70.9	67.9	■
Texas	63.0	65.3	■
Utah	61.5	67.7	■
Vermont	67.1	70.0	■
Virginia	68.1	68.0	■
Washington	70.2	67.4	■
West Virginia	68.9	65.7	■
Wisconsin	66.8	68.8	■
Wyoming	60.5	64.1	■

--- Data not available.

United States – Based on data from the National Health Interview Survey (NHIS) for 1998, 64 percent of women 50 and older reported that they had a clinical breast exam and a mammogram within the last 2 years. The year 2000 target of 60 percent was, therefore, exceeded. The baseline in 1987 was 25 percent.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of women 50 years of age and older who reported receiving both a mammogram and a clinical breast exam within the last 2 years for the States was 68.5.



States

■ 47	Based on BRFSS data, 47 States attained the target in both 1998 and 1999.
□ 2	Two States attained the target in 1999 but not in 1998.
□ 1	Mississippi attained the target in 1998 but not in 1999.
□ 1	Data for California were not available in 1999.

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure PP. Objective 16.12–Percent of women 18 years of age and older who had a Pap test during the last 3 years: United States and each State, 1998 and 1999

	Percent of women 18 years and older		Target status (85.0)
	1998	1999	
United States (NHIS)	79.0	---	
Median of States (BRFSS)	81.5	85.4	
Alabama	85.3	86.6	■
Alaska	89.5	90.9	■
Arizona	81.7	86.1	
Arkansas	78.9	82.6	
California	82.3	---	
Colorado	87.0	87.4	■
Connecticut	86.2	88.3	■
Delaware	87.1	87.7	■
District of Columbia	93.9	90.8	■
Florida	85.9	85.3	■
Georgia	86.1	88.0	■
Hawaii	86.3	87.1	■
Idaho	82.5	79.3	
Illinois	84.5	84.9	
Indiana	80.9	82.4	
Iowa	84.5	85.3	
Kansas	85.6	87.4	■
Kentucky	84.3	83.4	
Louisiana	84.8	85.4	
Maine	85.0	89.5	■
Maryland	89.2	89.2	■
Massachusetts	87.7	86.2	■
Michigan	88.1	85.8	■
Minnesota	85.0	87.5	■
Mississippi	84.4	84.1	
Missouri	85.4	84.6	
Montana	80.6	85.2	
Nebraska	82.4	84.8	
Nevada	85.1	78.5	
New Hampshire	84.2	88.4	
New Jersey	81.4	84.3	
New Mexico	82.6	83.7	
New York	83.8	84.2	
North Carolina	87.7	90.9	■
North Dakota	85.5	86.6	■
Ohio	84.2	85.5	
Oklahoma	84.8	83.8	
Oregon	83.7	87.6	
Pennsylvania	83.8	83.6	
Rhode Island	85.2	86.0	■
South Carolina	85.0	87.0	■
South Dakota	86.3	85.4	■
Tennessee	86.1	85.1	■
Texas	81.5	82.7	
Utah	78.4	80.8	
Vermont	86.0	88.4	■
Virginia	84.9	85.5	
Washington	85.4	85.9	■
West Virginia	81.0	80.7	
Wisconsin	83.4	84.7	
Wyoming	82.0	83.8	

--- Data not available.

United States – Based on data from the National Health Interview Survey (NHIS) for 1998, 79 percent of women 18 years of age and older reported that they had a Pap test within the last 3 years. The baseline in 1987 was 75 percent. Forty percent of the change required to meet the year 2000 target was achieved.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of women 18 years of age and older who reported having a Pap test during the last 3 years for the States was 85.4.

States	
■ 23	Based on data from the BRFSS, 23 States attained the national target in both 1998 and in 1999.
☐ 8	Eight States attained the target in 1999 but not in 1998.
☐ 19	In 1999, there were 19 States where 78.5 to 84.9 percent of women 18 and older reported having a Pap test during the last 3 years.
☐ 1	Data for California were not available in 1999.

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure QQ. Objective 16.13--Percent of persons 50 years of age and older who have had a fecal occult blood test during the last 2 years: United States and each State, 1997 and 1999

	Percent of adults 50 years and older	
	1997	1999
United States (NHIS)	—	35.0[1]
Median of States (BRFSS)	25.6	26.2
Alabama	19.2	17.6
Alaska	25.0	17.3
Arizona	29.3	32.9
Arkansas	21.3	22.9
California	24.8	23.0
Colorado	32.2	29.7
Connecticut	31.1	36.8
Delaware	30.5	29.0
District of Columbia	37.8	43.0
Florida	30.1	32.4
Georgia	27.8	21.7
Hawaii	32.2	28.7
Idaho	25.4	23.1
Illinois	24.9	25.8
Indiana	22.2	22.4
Iowa	28.0	33.0
Kansas	31.5	26.1
Kentucky	26.1	23.9
Louisiana	23.3	23.8
Maine	35.0	35.9
Maryland	32.1	37.8
Massachusetts	34.2	35.2
Michigan	31.0	33.1
Minnesota	32.3	26.2
Mississippi	13.5	17.8
Missouri	25.1	25.0
Montana	24.0	26.4
Nebraska	24.4	27.4
Nevada	16.0	20.0
New Hampshire	33.9	40.7
New Jersey	28.5	35.4
New Mexico	21.7	23.9
New York	31.9	29.2
North Carolina	36.5	38.5
North Dakota	22.7	24.5
Ohio	29.4	30.9
Oklahoma	14.3	23.3
Oregon	34.6	32.2
Pennsylvania	28.8	31.0
Rhode Island	26.5	31.4
South Carolina	24.0	26.4
South Dakota	21.7	25.2
Tennessee	22.3	23.3
Texas	25.0	23.0
Utah	22.0	19.8
Vermont	35.1	37.4
Virginia	25.9	26.2
Washington	35.9	35.7
West Virginia	18.0	19.1
Wisconsin	25.4	21.3
Wyoming	19.3	18.4

— Data not available.

[1] 1998 data.

United States – In 1998, based on data from the National Health Interview Survey (NHIS), 35 percent of the population 50 years and older had a fecal occult blood test during the last 2 years. The baseline in 1987 was 27 percent. Thirty-five percent of the change required to meet the year 2000 target was achieved.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of the population 50 years and older who had a fecal occult blood test during the last 2 years for the States was 26.2.

States – It is not appropriate to assess attainment of the national target based on the BRFSS data because the NHIS and BRFSS are not comparable and the national target was set based on data from the NHIS. The twelve States in the highest quartile for the percent of the population 50 years and older who reported having a fecal occult blood test during the last two years in 1999 are shown below.

District of Columbia	43.0
New Hampshire	40.7
North Carolina	38.5
Maryland	37.8
Vermont	37.4
Connecticut	36.8
Maine	35.9
Washington	35.7
New Jersey	35.4
Massachusetts	35.2
Michigan	33.1
Iowa	33.0

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure RR. Objective 16.13--Percent of persons 50 years of age and older who have ever had a sigmoidoscopy or procotoscopic exam: United States and each State, 1997 and 1999

	Percent of adults 50 and older	
	1997	1999
United States (NHIS)	---	37.0[1]
Median of States (BRFSS)	40.8	43.6
Alabama	43.0	41.2
Alaska	41.0	50.4
Arizona	39.2	36.8
Arkansas	34.4	42.1
California	46.6	48.2
Colorado	43.5	44.2
Connecticut	45.0	48.7
Delaware	47.8	56.0
District of Columbia	49.2	48.4
Florida	45.8	45.0
Georgia	48.1	47.4
Hawaii	51.6	44.2
Idaho	38.4	41.3
Illinois	40.3	43.9
Indiana	38.5	43.4
Iowa	40.7	46.4
Kansas	37.5	38.8
Kentucky	34.2	34.7
Louisiana	37.0	36.7
Maine	42.4	42.4
Maryland	37.1	50.5
Massachusetts	41.3	43.9
Michigan	47.8	49.5
Minnesota	50.9	47.5
Mississippi	35.8	37.4
Missouri	41.1	38.0
Montana	39.7	43.2
Nebraska	38.2	33.7
Nevada	42.3	43.1
New Hampshire	42.8	46.8
New Jersey	39.6	44.0
New Mexico	39.4	43.1
New York	43.7	42.2
North Carolina	39.2	39.1
North Dakota	44.9	42.0
Ohio	37.5	40.7
Oklahoma	22.3	37.7
Oregon	46.1	47.1
Pennsylvania	40.2	39.7
Rhode Island	42.6	48.7
South Carolina	29.2	41.8
South Dakota	37.6	45.5
Tennessee	34.2	39.3
Texas	38.2	44.3
Utah	45.1	44.1
Vermont	40.2	42.2
Virginia	47.6	44.2
Washington	44.0	50.8
West Virginia	34.4	34.9
Wisconsin	50.3	52.4
Wyoming	45.3	46.5

—Data not available.

[1] 1998 data.

United States -- In 1998, based on data from the National Health Interview Survey (NHIS), 37 percent of the population 50 years and older reported having ever had a proctosigmoidoscopy. The baseline in 1987 was 25 percent. Eighty percent of the change required to meet the year 2000 target was achieved.

In 1999, based on data from the Behavioral Risk Factor Surveillance System (BRFSS), the median percent of the population 50 years and older who ever had a sigmoidoscopy or proctoscopic exam for the States was 43.6.

States -- It is not appropriate to assess attainment of the national target based on the BRFSS data because the NHIS and BRFSS are not comparable and the national target was set based on data from the NHIS. The 12 States in the highest quartile for the percent of the population 50 years and older who ever had a sigmoidoscopy or proctoscopic exam in 1999 are shown below.

Delaware	56.0
Wisconsin	52.4
Washington	50.8
Maryland	50.5
Alaska	50.4
Michigan	49.5
Connecticut	48.7
Rhode Island	48.7
District of Columbia	48.4
California	48.2
Minnesota	47.5
Georgia	47.4

SOURCE: CDC, NCCDPHP, Behavioral Risk Factor Surveillance System.

Figure SS. Objective 17.9--Age-adjusted death rates for diabetes-related deaths: United States and each State, 1997 and 1998

	Age-adjusted death rate per 100,000		Target status (34.0)
	1997	1998	
United States	40.6	40.9	■
Alabama	38.1	39.9	■
Alaska	38.1	36.6	□
Arizona	29.3	30.6	■
Arkansas	33.2	34.5	□
California	44.9	45.8	■
Colorado	29.6	31.1	■
Connecticut	36.9	37.5	□
Delaware	48.4	48.5	■
District of Columbia	59.4	59.1	■
Florida	28.6	29.1	■
Georgia	38.7	39.1	■
Hawaii	41.4	42.2	■
Idaho	32.8	34.4	□
Illinois	40.5	40.6	■
Indiana	42.2	41.4	■
Iowa	36.7	37.1	□
Kansas	33.8	35.0	□
Kentucky	40.3	38.9	■
Louisiana	43.4	45.6	■
Maine	42.5	42.0	■
Maryland	54.3	54.2	■
Massachusetts	34.2	33.7	□
Michigan	43.3	43.8	■
Minnesota	34.4	34.8	□
Mississippi	51.0	51.3	■
Missouri	42.5	42.7	■
Montana	29.4	32.2	■
Nebraska	35.3	35.3	□
Nevada	31.9	33.6	■
New Hampshire	42.1	41.4	■
New Jersey	38.2	36.1	□
New Mexico	34.6	35.2	□
New York	35.5	35.2	□
North Carolina	49.7	52.0	■
North Dakota	33.7	38.1	■
Ohio	52.3	51.2	■
Oklahoma	40.9	39.6	■
Oregon	39.3	42.8	■
Pennsylvania	46.1	45.3	■
Rhode Island	45.3	43.7	■
South Carolina	49.0	49.0	■
South Dakota	32.4	36.4	□
Tennessee	42.2	44.4	■
Texas	46.1	45.9	■
Utah	33.8	36.1	□
Vermont	46.1	42.5	■
Virginia	39.6	38.7	■
Washington	35.4	36.1	□
West Virginia	54.3	56.1	■
Wisconsin	36.8	36.9	□
Wyoming	32.0	35.1	□

United States – At baseline in 1986, the age-adjusted diabetes-related death rate was 38 per 100,000 population. In 1998, the rate was 40.9. Instead of declining by 4 deaths per 100,000, the rate increased by 2.9 deaths per 100,000. In this case the rate moved away from the target.

States

■ Five States attained the target in 1997 and 1998.

□ 1 One State attained the target only in 1998.

□ 16 In 1998, 16 States had rates between the year 2000 target (34) and the 1987 baseline (38).

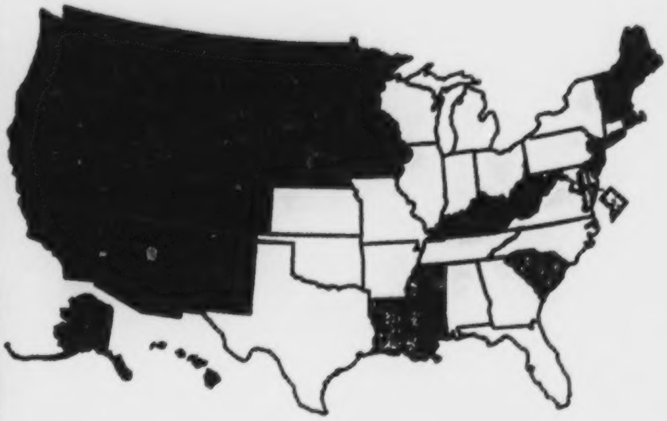
■ 29 In 1998, 29 States had rates greater than the baseline for the United States in 1987 (38).

SOURCE: CDC, NCHS, National Vital Statistics System.

Figure TT. Objective 19.1–Reported incidence of gonorrhea per 100,000 population: United States and each State, 1998 and 1999

	Reported cases per 100,000 population		Target status
	1998	1999	(100)
United States	131.6	132.0	□
Alabama	292.7	249.2	□
Alaska	53.9	48.7	■
Arizona	90.2	89.8	■
Arkansas	155.7	126.4	□
California	59.7	56.3	■
Colorado	51.2	62.3	■
Connecticut	97.0	101.2	□
Delaware	209.3	220.6	□
District of Columbia	881.7	681.3	▨
Florida	127.9	151.8	□
Georgia	270.4	272.8	□
Hawaii	42.4	39.1	■
Idaho	14.8	7.1	■
Illinois	180.4	191.7	□
Indiana	106.9	102.5	□
Iowa	56.5	47.6	■
Kansas	99.7	100.4	□
Kentucky	96.9	84.6	■
Louisiana	286.1	301.7	▨
Maine	5.4	6.6	■
Maryland	219.2	201.7	□
Massachusetts	36.7	39.7	■
Michigan	166.6	161.3	□
Minnesota	57.3	59.3	■
Mississippi	388.4	376.0	▨
Missouri	174.0	149.7	□
Montana	6.2	6.0	■
Nebraska	72.4	88.3	■
Nevada	82.7	72.0	■
New Hampshire	7.7	9.6	■
New Jersey	96.8	96.4	■
New Mexico	55.1	56.0	■
New York	104.9	109.0	□
North Carolina	254.8	253.9	□
North Dakota	12.5	13.1	■
Ohio	163.0	161.2	□
Oklahoma	156.7	119.7	□
Oregon	26.8	27.2	■
Pennsylvania	97.6	110.6	□
Rhode Island	43.5	60.7	■
South Carolina	301.7	387.0	▨
South Dakota	29.9	26.2	■
Tennessee	218.0	207.3	□
Texas	166.2	164.2	□
Utah	11.2	11.9	■
Vermont	6.4	8.8	■
Virginia	138.4	136.8	□
Washington	34.2	37.0	■
West Virginia	50.8	32.3	■
Wisconsin	121.6	126.9	□
Wyoming	7.5	9.0	■

United States – In 1989, there were 300 gonorrhea cases per 100,000 population. The objective for the year 2000 was 100 cases per 100,000. In 1999 there were 133 cases per 100,000. Eighty-four percent of the target for the year 2000 had been achieved in 1999.



States

■ 26 Twenty-six States attained the target in both 1998 and 1999.

□ 21 In 1999, 21 States had rates between the year 2000 target (100) and the 1989 baseline (300).

▨ 4 In 1999, four States had rates greater than the baseline for the United States in 1989 (300).

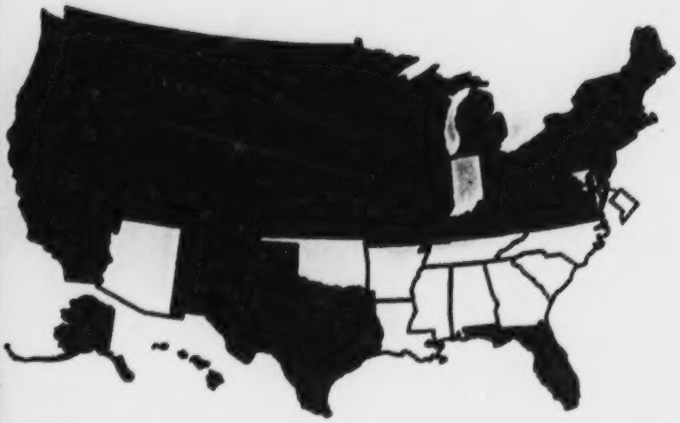
SOURCE: CDC, NCHSTP, Sexually Transmitted Disease Surveillance System.

Figure UU. Objective 19.3--Reported cases of primary and secondary syphilis per 100,000 population: United States and each State, 1998 and 1999

	Reported cases per 100,000 population		Target status (4.0)
	1998	1999	
United States	2.6	2.4	■
Alabama	6.3	4.6	□
Alaska	0.2	0.2	■
Arizona	4.0	4.4	□
Arkansas	4.3	3.4	□
California	0.9	0.9	■
Colorado	0.3	0.2	■
Connecticut	0.8	0.5	■
Delaware	2.8	1.3	■
District of Columbia	15.5	8.7	□
Florida	2.0	2.5	■
Georgia	4.4	5.5	□
Hawaii	0.3	0.3	■
Idaho	0.2	0.1	■
Illinois	3.5	3.5	■
Indiana	3.6	7.6	□
Iowa	0.2	0.3	■
Kansas	0.5	0.5	■
Kentucky	2.7	2.5	■
Louisiana	9.8	7.0	□
Maine	0.1	0.0	■
Maryland	12.6	6.6	□
Massachusetts	0.7	0.6	■
Michigan	2.1	2.5	■
Minnesota	0.2	0.2	■
Mississippi	9.5	7.0	□
Missouri	2.0	1.8	■
Montana	0.0	0.1	■
Nebraska	0.5	0.4	■
Nevada	0.9	0.3	■
New Hampshire	0.2	0.1	■
New Jersey	1.3	0.8	■
New Mexico	0.8	0.7	■
New York	0.7	0.8	■
North Carolina	9.6	6.1	□
North Dakota	0.0	0.0	■
Ohio	1.2	0.8	■
Oklahoma	2.9	5.6	□
Oregon	0.2	0.2	■
Pennsylvania	0.8	0.7	■
Rhode Island	0.1	0.3	■
South Carolina	7.1	6.9	□
South Dakota	0.1	0.0	■
Tennessee	10.4	11.7	□
Texas	2.2	2.4	■
Utah	0.2	0.1	■
Vermont	0.7	0.5	■
Virginia	2.2	2.2	■
Washington	0.8	1.3	■
West Virginia	0.2	0.3	■
Wisconsin	1.1	0.8	■
Wyoming	0.2	0.0	■

0.0 Quantity more than zero but less than 0.05.

United States – In 1989, there were 18.1 cases of primary and secondary syphilis per 100,000 population. The objective for the year 2000 was 4 cases per 100,000. In 1999, there were 2.5 cases per 100,000. More than 100 percent (111 percent) of the targeted change had been achieved in 1999.



States

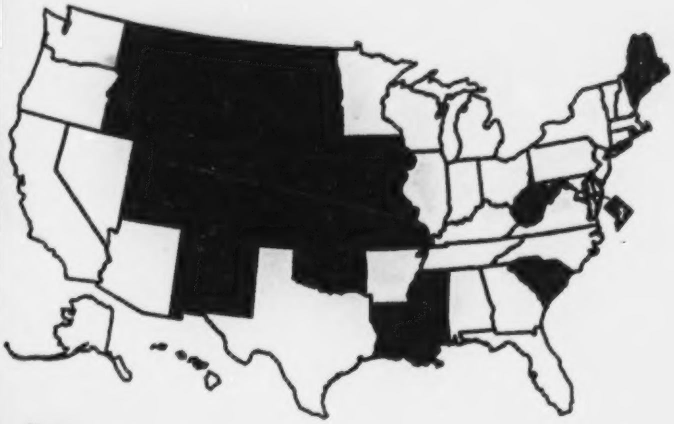
■ 38	Thirty-eight States attained the target in both 1998 and 1999.
□ 1	One State attained the target only in 1999.
□ 12	In 1999, 12 States had rates between the year 2000 target (4.0) and the 1989 baseline (18.1).

SOURCE: CDC, NCHSTP, Sexually Transmitted Disease Surveillance System.

Figure WW. Objective 20.1–Reported cases of measles: United States and each State, 1998 and 1999

	Number of cases		Target status (0)
	1998	1999	
United States	100	100	□
Alabama	1	0	□
Alaska	33	0	□
Arizona	11	1	□
Arkansas	0	5	□
California	9	17	□
Colorado	0	0	■
Connecticut	0	2	□
Delaware	1	0	□
District of Columbia	0	0	■
Florida	2	2	□
Georgia	2	0	□
Hawaii	0	3	□
Idaho	0	0	■
Illinois	1	2	□
Indiana	3	2	□
Iowa	0	0	■
Kansas	0	0	■
Kentucky	0	2	□
Louisiana	0	0	■
Maine	0	0	■
Maryland	1	0	□
Massachusetts	2	8	□
Michigan	10	6	□
Minnesota	0	1	□
Mississippi	0	0	■
Missouri	0	0	■
Montana	0	0	■
Nebraska	0	0	■
Nevada	0	1	□
New Hampshire	0	1	□
New Jersey	8	0	□
New Mexico	0	0	■
New York	4	5	□
North Carolina	1	0	□
North Dakota	0	0	■
Ohio	1	0	□
Oklahoma	0	0	■
Oregon	0	12	□
Pennsylvania	4	0	□
Rhode Island	0	0	■
South Carolina	0	0	■
South Dakota	0	0	■
Tennessee	1	0	□
Texas	0	7	□
Utah	0	0	■
Vermont	1	0	□
Virginia	2	18	□
Washington	1	5	□
West Virginia	0	0	■
Wisconsin	1	0	□
Wyoming	0	0	■

United States – The United States did not attain the target of zero cases of measles in 1998 or 1999. The number of measles cases was reduced by 97 percent from 3,396 in 1988 to 100 in both 1998 and 1999.



States

■ 20	Twenty States attained the target in both 1998 and 1999.
□ 12	Twelve States attained the target in 1999 but not in 1998.
□ 19	Nineteen States did not attain the target in 1998 or in 1999.

SOURCE: CDC, EPO, National Notifiable Disease Surveillance System.

Figure YY. Objective 20.11–Estimated vaccination coverage with the 4DTP/3polio/1MMR[1] series among children ages 19-35 months: United States and each State, 1998 and 1999

	Percent		Target status (90)
	1998	1999	
United States	80.6	79.9	
Alabama	84.0	79.7	
Alaska	82.7	82.2	
Arizona	77.8	73.9	
Arkansas	74.8	78.5	
California	77.7	78.3	
Colorado	78.2	77.2	
Connecticut	90.7	87.1	
Delaware	80.6	80.0	
District of Columbia	73.7	78.5	
Florida	80.9	82.0	
Georgia	81.1	83.1	
Hawaii	81.7	82.8	
Idaho	76.4	70.0	
Illinois	79.1	78.8	
Indiana	78.9	75.4	
Iowa	83.4	84.5	
Kansas	83.6	79.7	
Kentucky	83.0	88.6	
Louisiana	79.7	76.9	
Maine	89.0	84.1	
Maryland	78.8	80.5	
Massachusetts	87.4	87.3	
Michigan	78.9	75.9	
Minnesota	83.1	87.0	
Mississippi	83.7	81.7	
Missouri	85.8	75.5	
Montana	82.8	84.8	
Nebraska	78.0	83.7	
Nevada	78.5	73.4	
New Hampshire	85.1	84.5	
New Jersey	85.0	80.9	
New Mexico	73.3	75.6	
New York	85.7	83.4	
North Carolina	84.1	81.8	
North Dakota	79.8	83.0	
Ohio	78.6	79.1	
Oklahoma	78.5	74.0	
Oregon	75.5	73.2	
Pennsylvania	84.0	86.6	
Rhode Island	87.3	90.4	
South Carolina	88.4	81.1	
South Dakota	75.1	83.4	
Tennessee	82.6	79.5	
Texas	74.8	74.7	
Utah	76.8	81.7	
Vermont	87.3	90.7	
Virginia	82.0	81.6	
Washington	81.1	76.5	
West Virginia	82.7	82.1	
Wisconsin	79.3	85.4	
Wyoming	80.4	83.5	

United States – In 1992, the vaccination coverage with the 4:3:1 series was 55 percent. In 1999, coverage had reached 80 percent, therefore, 71 percent of the targeted increase in immunization had been achieved in 1999.

States

2	Two States attained the target in 1999.
49	Forty-nine States did not attain the target in 1998 and 1999 or in 1999.

SOURCE: CDC, NCHS and NIP, National Immunization Survey.

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[1] 4 or more doses of DTP/DT (diphtheria, tetanus, pertussis), 3 or more doses of polio, 1 or more doses of MMR (measles, mumps, rubella).

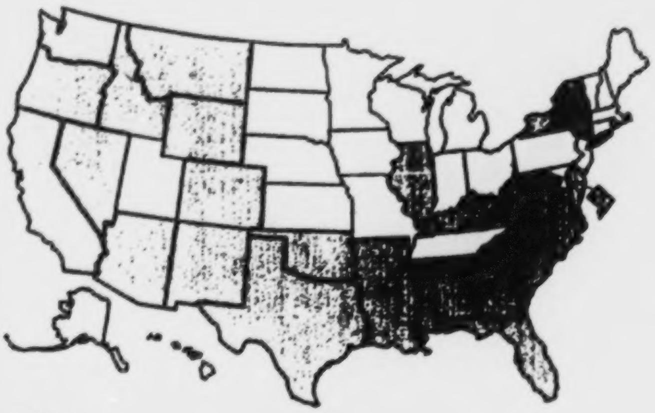
Figure ZZ. Objective 21.4--Percent of persons under 65 years of age with no health insurance coverage: United States and each State, 1998 and 1999

	Percent with no health care coverage		Target status (0)
	1998	1999	
United States (NHIS)	16.6	--	
United States (CPS)	18.4	17.4	
Alabama	19.5	16.2	
Alaska	17.9	20.0	
Arizona	26.9	24.0	
Arkansas	21.7	16.9	
California	24.4	22.3	
Colorado	16.4	18.3	
Connecticut	14.3	11.3	
Delaware	17.1	12.8	
District of Columbia	19.2	17.6	
Florida	21.1	22.8	
Georgia	19.4	17.9	
Hawaii	11.3	12.3	
Idaho	19.7	21.6	
Illinois	16.6	15.7	
Indiana	16.1	12.3	
Iowa	10.9	9.5	
Kansas	12.2	13.9	
Kentucky	16.0	16.3	
Louisiana	21.3	25.0	
Maine	14.6	13.2	
Maryland	18.9	13.5	
Massachusetts	11.6	11.8	
Michigan	14.9	12.4	
Minnesota	10.3	8.9	
Mississippi	22.9	18.9	
Missouri	12.1	9.6	
Montana	21.9	21.0	
Nebraska	10.2	12.3	
Nevada	23.7	22.8	
New Hampshire	12.5	11.3	
New Jersey	18.0	15.0	
New Mexico	24.0	29.4	
New York	19.7	18.5	
North Carolina	17.0	17.3	
North Dakota	16.5	13.8	
Ohio	11.7	12.5	
Oklahoma	21.2	20.4	
Oregon	16.0	16.4	
Pennsylvania	12.1	11.0	
Rhode Island	7.6	8.1	
South Carolina	17.4	20.1	
South Dakota	16.3	13.5	
Tennessee	14.3	12.6	
Texas	26.9	25.7	
Utah	15.1	15.3	
Vermont	11.0	13.6	
Virginia	15.8	15.8	
Washington	13.4	17.5	
West Virginia	20.8	20.5	
Wisconsin	13.2	12.2	
Wyoming	18.8	17.8	

--Data not available.

United States -- In 1998, based on data from the National Health Interview Survey (NHIS), 16.6 percent of the population under 65 years of age had no health insurance coverage (age adjusted). The baseline in 1989 was 15.7 percent. The proportion without health insurance coverage was greater in 1998 than it was in 1989.

In 1999, based on data from the Current Population Survey (CPS), 17.4 percent of the population under 65 years of age had no health insurance coverage.



States

24	Based on the CPS data, 24 States had proportions of persons with no health insurance coverage greater than the national target for the year 2000 (0) and less than the national baseline in 1989 (15.7).
27	In 1999, 27 States had proportions of persons with no health insurance coverage greater than or equal to the national baseline in 1989 (15.7).

SOURCE: U.S. Census Bureau, Current Population Survey.

NOTE: The NHIS data are age adjusted and refer to coverage at the time of the survey. The CPS data are not age adjusted and refer to coverage during the previous calendar year. Despite these differences, target attainment is assessed based on the CPS data because the objective was to reduce the percent of the population without health insurance coverage to zero.

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Healthy People 2000 Priority Areas

Priority Area 1 Physical Activity and Fitness

Background

The importance of physical activity, fitness, and exercise spans a spectrum of public health issues ranging from disease prevention and enhancement of a healthy lifestyle for all age groups to the maintenance of an independent lifestyle in the later stages of life (1). Research has demonstrated that virtually all individuals can benefit from regular physical activity, whether they participate in vigorous exercise or some type of moderate health-enhancing physical activity (2).

The importance of physical activity in reducing morbidity and mortality from chronic diseases has been well established. A 1990 study showed that 14 percent of all deaths in the United States were attributed to diet and activity patterns (3). A more recent study linked sedentary lifestyles to 23 percent of deaths from the major chronic diseases (4). For example, physical activity has been shown to reduce the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure (2). Some evidence suggests that physical activity may also protect against lower back pain and some forms of cancer (for example, breast cancer) (5,6). On average, people who are physically active outlive those who are inactive (4, 7–10). However, most adults and many children are not active enough to achieve these health benefits, and the prevalence of physical activity has changed only slightly in the past decade (2). Only 30 percent of adults spend sufficient time in moderate activity and only 14 percent are vigorously active at the suggested levels.

The economic burden of physical inactivity is substantial. One study estimated that increasing regular moderate physical activity among the more than 88 million inactive Americans over the age of 15 years might reduce the annual national direct medical costs by as much as $76.6 billion in 2000 dollars (11).

Data Summary

Highlights

More than one-half of the physical activity and fitness objectives either achieved or moved toward the year 2000 targets. The age-adjusted death rate from coronary heart disease (1.1) for the population as a whole declined to a level that exceeded the year 2000 target, dropping from 156 deaths per 100,000 persons in 1987 to 87 per 100,000 in 1998. Among blacks, the coronary heart disease death rate also dropped but fell short of meeting the year 2000 target.

Gains were made in increasing the proportion of worksites that offer physical fitness programs (1.10). By 1999, three of the four size groupings for worksites (those with 50–99 employees, 100–249 employees, and 250–749 employees) had exceeded their year 2000 targets, while worksites with 750 and more employees moved toward but did not meet the target.

Participation in moderate (1.3) physical activity five or more times per week increased over the decade, meeting the year 2000 target of 30 percent, whereas the proportion of adults participating in physical activity seven or more times per week moved toward, but did not meet the 30–percent target. Regular participation in strengthening and stretching exercises (1.6) among students in grades 9–12 met the year 2000 target of 40 percent, while participation among persons ages 18–64 years increased to 19 percent for weight lifting and 32 percent for stretching. A small improvement was also seen in the proportion of persons participating in vigorous (1.4) physical activity.

Some objectives moved away from the year 2000 targets. The prevalence of overweight (1.2) increased across all population groups with the greatest increase occurring among adolescents ages 12–19 years. The proportion of both male and female adults reporting the use of sound weight loss practices (1.7) decreased as did the proportion of students participating in daily physical education at school (1.8), and the number of people 70 years and over (1.13) needing help with self care.

Summary of Progress

Of the 13 objectives that address physical activity and fitness, 1 objective (1.1) surpassed the year 2000 target. Another six objectives (1.3, 1.4, 1.6, 1.9, 1.10, and 1.12) moved toward their targets, and four objectives (1.2, 1.7, 1.8, and 1.13) moved away from their targets. One objective (1.5) showed no change, and data are not available to measure progress for the remaining objective (1.11). See table 1 for the tracking data for the objectives in this priority area and figure 1 for a quantitative assessment of progress.

Discussion

While 7 of the 13 objectives related to physical activity and fitness showed improvement by the end of the decade, greater progress could be realized if certain barriers are overcome. Moving the Nation's population into a more active lifestyle is complicated and requires changes at many levels including individual behavior, environmental features, policy issues, social norms, and family supports. For example, in spite of evidence that suggests active children are likely to become active adults, schools no longer require daily physical education. School, however, may be the best opportunity for children to be active because most children do not walk or ride a bike to school and many spend the time after school in sedentary activities (for example, homework or watching television). Similarly, worksites that provide facilities and other supports for an active lifestyle may offer the best opportunities for adults.

Because physical inactivity is a risk factor for many diseases and conditions, making physical activity an integral part of daily life is crucial. To achieve the physical activity and fitness objectives, public health programs will need to develop comprehensive approaches that provide for participation in physical activities at many levels. Such approaches should include environmentally based strategies aimed at increasing access to facilities as well as efforts that promote family and community activities (for example, at schools, worksites, and communities).

Transition to *Healthy People 2010*

In *Healthy People 2010*, the focus of the physical activity and fitness objectives has been expanded to include a broader range of activities than those

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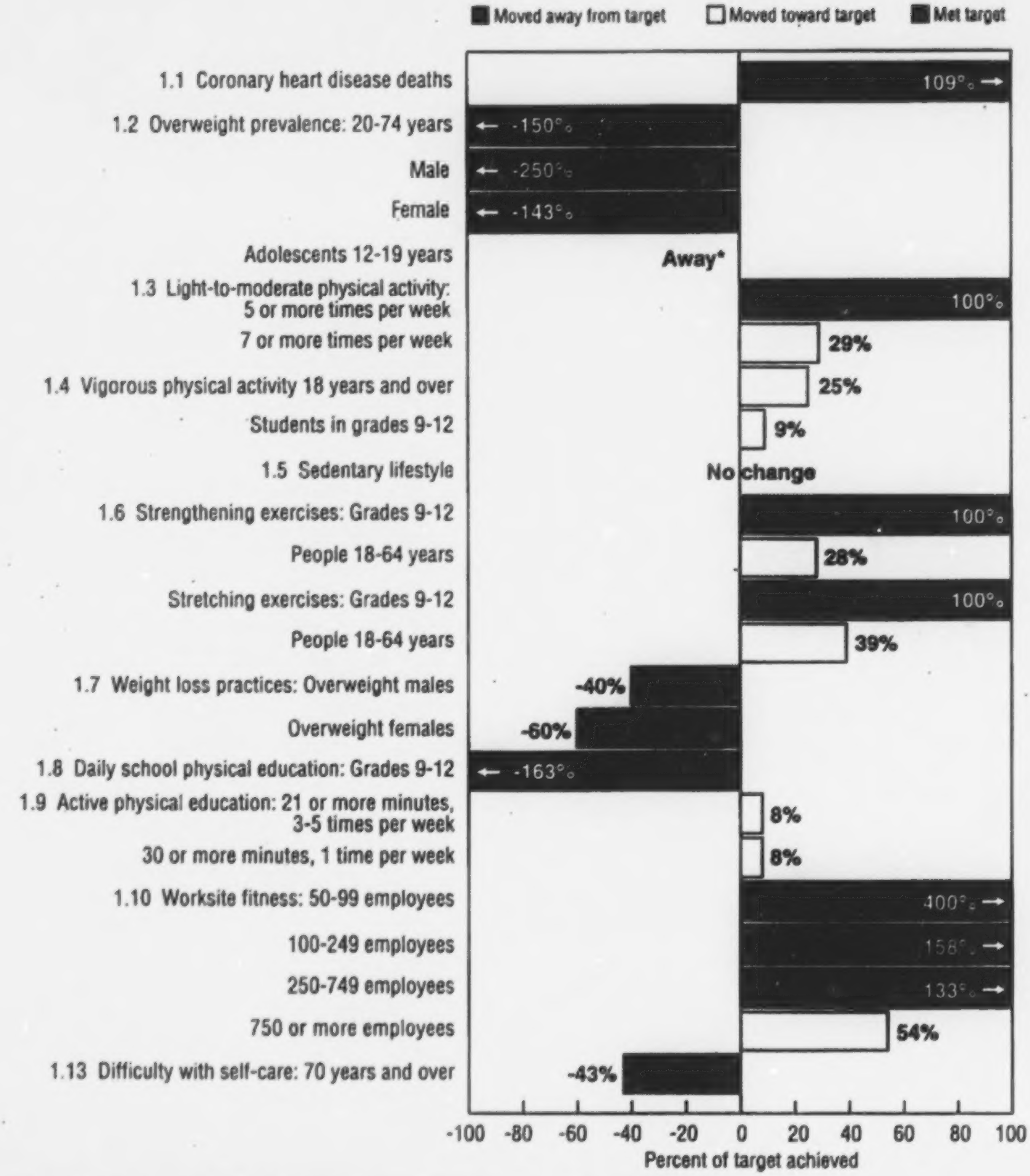
Figure 1. Final status of Physical Activity and Fitness objectives



* This objective has moved away from its target. A progress quotient could not be calculated.

NOTE: Complete tracking data are shown in table 1. Progress quotients are not calculated for objectives 1.11 and 1.12. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

presented in *Healthy People 2000.* To avoid duplication of objectives across chapters, some topics previously included in the *Healthy People 2000* Physical Activity and Fitness chapter are only in the *Healthy People 2001* focus areas that were considered their "primary homes" (for example, the objectives for coronary heart disease deaths and overweight prevalence are located only in the Heart Disease and Stroke and the Nutrition and Overweight chapters, respectively).

The *Healthy People 2010* Physical Activity and Fitness chapter is organized into four sections: physical activity in adults, muscular strength/endurance and flexibility, physical activity in children and adolescents, and access. The *Healthy People 2010* objectives continue to reflect the importance of moderate activity in achieving and maintaining a healthy lifestyle. For example, the 2010 objectives include measures of walking and bicycling, and public access to local school facilities after hours. These objectives replace the unmeasured *Healthy People 2000* objective assessing community fitness facilities (**1.11**) by encouraging a combination of individual behavior (walking or bicycling) and community support for activity.

Attention on activity patterns among children and adolescents is highlighted in its own section, which includes objectives on moderate and vigorous physical activity, as well as school-based policy objectives. A new objective calling for a limit on television viewing has been included in *Healthy People 2010.* This emphasis on children and adolescents is particularly appropriate considering that the health benefits of physical activity are not limited to adults and that patterns adopted early in life may continue into adulthood.

The objective on physician counseling regarding exercise (**1.12**) has been combined with other counseling behaviors to create a new objective in the *Healthy People 2010* chapter on Access to Quality Health Services. Likewise, a *Healthy People 2010* objective on the importance of teaching physical activity in health classes is in the Educational and Community-Based Programs chapter. Because physical activity affects many other health conditions, related objectives have been identified from 23 other chapters.

Physical activity is the topic of 1 of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. Two objectives from the *Healthy People 2010* Physical Activity and Fitness focus area—the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion and the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day—are used to measure this LHI.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 1 have been published in the National Center for Health Statistics' *Healthy People Statistical Notes* series (12). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. Where appropriate, the text of the questionnaire items used to measure the objectives is also provided. See the Appendix for further information.

Coronary heart disease deaths (**1.1**) are defined by ICD–9 codes 402, 410–414, and 429.2. These codes are different from the codes used to define the category "Diseases of heart," which often appears in published tables (see the Appendix and Appendix table II).

When the *Healthy People 2000* objectives were released in 1990 (13), physical activity as a recognized benefit for health outcomes was still a relatively new concept; this newness contributed to difficulties in tracking some objectives with appropriate operational definitions. Calculations vary from simple counts (for example, weight-training three or more times a week) to complex formulas (for example, calculating average kilocalories expended per kilogram per day) (14). Because of the growing appreciation of the benefits of regular physical activity, the intent of objective **1.3** (light-to-moderate physical activity) was to generate calorie-burning activity by emphasizing the importance of regular physical activity that can be sustained throughout the lifespan. The sum of all physical activities performed at least 30 minutes per occasion five or more or seven or more times a week regardless of the intensity has been defined as measuring this objective.

To measure the proportion of adults performing vigorous physical activity (**1.4**), the predicted maximum cardiorespiratory capacity was estimated using age- and sex-based regression equations and then multiplying by 50 percent. Next, all the activities that were performed for at least 20 minutes that had a kilocalorie value that was equal to or greater than that 50 percent level were counted (15,16). The estimated number of people who exercise vigorously were respondents who performed these activities three or more times per week.

Overweight (**1.2**) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 Second National Health and Nutrition Examination Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II. BMI cutoff points for adults are 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. *Healthy People 2010* defines the upper limit of the healthy weight range as a BMI of less than 25 because chronic disease risk increases in most populations at or above this cut-point (1). See the Nutrition chapter (Priority Area 2) for additional information.

The 1984–85 baseline figures for objective **1.13** were derived by combining estimates for the noninstitutionalized population from the 1984 National Health Interview Survey (NHIS) Supplement on Aging (SOA) with data for those in nursing homes from the 1985 National Nursing Home Survey (NNHS). The 1984 SOA asked about seven specific personal care activities, also referred to as activities of daily living (ADLs) for persons 65 years and over. Because of the way the questions were asked on the NNHS, only five ADLs (bathing, dressing, using the toilet, getting in and out of bed or chair, and eating) were used for tracking this objective. The numerator included respondents to the SOA who said they had "any difficulty" performing at least two ADLs combined with patients for whom administrators reported to the NNHS as "receiving assistance" with at least two ADLs. The denominator for the baseline was the civilian, noninstitutionalized population 65 years and over plus the nursing home population 65 years and over. The update for this objective is derived from combined data from the 1994 NHIS Second Supplement on Aging (SOA II) and data from the 1995 NNHS using the same questions as were used for the baseline. However, the 1994–95 update is for persons 70 years and over. The 1984–85 data were also computed for ages 70 years and over to provide a comparison with the 1994–95 update.

Data Comparability

Overweight (**1.2**) was tracked with two data sources. The primary data source is the NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source is the NHIS. This survey provides interim estimates shown in an earlier publication (17), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES: Prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase, however, is different in magnitude from that observed in the data derived from measured height and weight.

Objective **1.3** (light-to-moderate physical activity) was tracked with the NHIS. The list of activities asked on the NHIS has not been identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years and over; thus, the data shown are for people 18–64 years of age. The 1991, 1995, and 1998 surveys asked about some different activities than the previous surveys, but people of all age groups were asked the same questions. Because of these differences, data from 1985 and 1990 are not comparable to later data.

The 1985 and 1992 data for objective **1.10** are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Both active methods (such as classes) and passive methods (such as brochures) were counted as worksite health promotion activities. The 1995 update is from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey but did not include passive methods of health promotion (18,19). The 1998–99 data are from the National Worksite Health Promotion Survey, which randomly sampled nongovernmental worksites of 50 or more employees in a particular geographic location. This telephone survey included questions regarding the offering of some types of physical activity or fitness facility for employees at the workplace or through the company's health plans (20). The 1998–99 data are not comparable to the data that were collected earlier, although similar questions were asked.

Data for objective **1.12**, clinician counseling about physical activity, were obtained from three different surveys, making statements about trends problematic. The 1988 baseline of 30 percent from the American College of Physicians (ACP) survey was a random stratified sample of ACP members drawn from 21 geographic regions yielding an initial sample of 1,251 internists. The sampling frame for internists in the 1992 Primary Care Provider Surveys (PCPS) also contained a random stratified sample of ACP members but was drawn from four geographic regions with oversampling of female members, yielding an initial sample of 1,200 internists. Additional provider groups sampled in the 1992 PCPS included pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. Response rates varied from 50 to 80 percent across the groups. The data on inquiry for objective **1.12** refer to the proportion of health care providers who routinely provided service to 81–100 percent of their clients. Data on formulation of an exercise plan represent the proportion of providers who routinely provide this service to 81–100 percent of their clients who need this intervention. Because inquiry and counseling services are not reimbursable, documenting their provision has proven to be difficult.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used, and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Proxy Data

Regular performance of physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility (**1.6**) generally requires participation in a variety of physical activities because not all activities will satisfy all three factors. Because scoring parameters for strength, endurance, and flexibility are not yet available, this objective has been tracked using data from the NHIS on an activity that increases muscular strength (weightlifting) and an activity that increases flexibility (stretching). The data shown for students in grades 9–12 are from the Youth Risk Behavior Surveillance System (YRBSS) and are based on self-reported participation in stretching exercises or strengthening exercises that were done four or more days per week.

Objective **1.7** is to increase to at least 50 percent the proportion of overweight people who use sound dietary practices combined with regular physical activity to attain appropriate body weight. Respondents to the NHIS identified as overweight based on their self-reported heights and weights who reported they were currently trying to lose weight or control their weight by eating fewer calories and exercising more were defined as using sound dietary practices for this objective. However, an assessment of the quality of dietary practices was not coupled with a measure of regular physical activity. The 1985 and 1990 NHIS questionnaires asked respondents specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991, 1993, 1995, and 1998, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, "Are you currently doing any of these things to control your weight?" Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

Objective 1.9 targets time spent in school physical education classes devoted to activities that may be readily carried into adulthood because their performance requires only one or two people (such as swimming, bicycling, jogging, and racquet sports). The proxy measure for this objective is the percent of class time spent in actual physical activity. The 1983 baseline data show the percent of physical education class time spent being physically active for all students. The YRBSS data for students in grades 9–12 show the percent who exercised in physical education class 21 or more minutes 3–5 times a week and 30 or more minutes 1 or more times per week. The 1994 data from the School Health Policies and Programs Study (SHPPS) show the proportion of physical education teachers using class time to involve students in actual physical activities.

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Table 1. Physical Activity and Fitness Objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	1.1*	**Coronary heart disease deaths** (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	100	97	---	100
		a. Black	1987	168	158	156	151	154	147	147	140	136	133	---	115
▨	1.2*	**Overweight prevalence** (based on measured height and weight unless otherwise indicated)													
		Adults 20–74 years	1976–80	26%	---	---	---	---	[1,2]35%	---	---	---	---	---	20%
		Male	1976–80	24%	---	---	---	---	[1,2]34%	---	---	---	---	---	20%
		Female	1976–80	27%	---	---	---	---	[1,2]37%	---	---	---	---	---	20%
		Adolescents 12–19 years	1976–80	15%	---	---	---	---	[1]24%	---	---	---	---	---	15%
		a. Low-income female 20–74 years	1976–80	37%	---	[3]47%	---	---	---	---	---	---	---	---	25%
		b. Black female 20–74 years	1976–80	44%	---	---	---	---	[1,2]52%	---	---	---	---	---	30%
		c. Hispanic female 20–74 years	...	---	---	---	---	---	---	---	---	---	---	---	25%
		Hispanic female 20 years and over	...	---	33%	32%	32%	33%	32%	35%	---	[‡]44%	[‡]46%	---	...
		Mexican American female 20–74 years	1982–84	39%	---	---	---	---	[1,2]50%	---	---	---	---	---	...
		Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	---	---	...
		Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	---	---	...
		d. American Indian/Alaska Native 20 years and over	1984–88	29–75%	---	[4]40%	[4]36%	[4]48%	[4]34%	[4]43%	---	[‡,4]46%	[‡,4]45%	---	30%
		e. People with disabilities 20 years and over[4]	1985	36%	---	38%	37%	38%	38%	40%	---	---	---	---	25%
		f. Females with high blood pressure 20–74 years	1976–80	50%	---	---	---	---	---	---	---	---	---	---	41%
		g. Males with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	---	---	35%
		h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	[1,2]37%	---	---	---	---	---	25%
☐	1.3*	**Light-to-moderate physical activity**													
		People 6 years and over	...	---	---	---	---	---	---	---	---	---	---	---	30%
		People 18 years and over													
		5 or more times per week	1985	[5]22%	[5]23%	[6]24%	---	---	---	23%	---	---	30%	---	30%
		7 or more times per week	1985	[5]16%	[5]16%	[6]17%	---	---	---	16%	---	---	20%	---	30%
		a. Hispanic 18 years and over													
		5 or more times per week	1991	20%	...	...	---	---	---	22%	---	---	29%	---	25%
☐	1.4	**Vigorous physical activity**													
		Children and adolescents 6–17 years	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Children and adolescents 10–17 years	1984	[§]59%	---	---	---	---	---	---	---	---	---	---	75%
		Students in grades 9–12	...	---	---	64%	---	66%	---	64%	---	64%	---	65%	75%
		People 18 years and over	1985	[5]12%	---	[6]16%	---	---	---	16%	---	---	14%	---	20%
		a. Lower-income people 18 years and over	1985	[5]7%	---	[6]15%	---	---	---	14%	---	---	10%	---	12%
		b. Black 18 years and over	1991	[§]13%	...	...	---	---	---	13%	---	---	11%	---	17%
		c. Hispanic 18 years and over	1991	[§]14%	...	...	---	---	---	14%	---	---	11%	---	17%
☐	1.5	**Sedentary lifestyle**													
		People 6 years and over	...	---	---	---	---	---	---	---	---	---	---	---	15%
		People 18 years and over	1985	24%	26%	24%	---	---	---	23%	---	---	24%	---	15%
		a. People 65 years and over	1985	43%	---	29%	---	---	---	27%	---	---	20%	---	22%
		b. People with disabilities	1985	35%	34%	30%	---	---	---	29%	---	---	---	---	20%
		c. Lower-income people	1985	32%	33%	32%	---	---	---	28%	---	---	29%	---	17%
		d. Black 18 years and over	1991	28%	...	...	---	---	---	28%	---	---	29%	---	20%

See footnotes and key at end of table.

Table 1. Physical Activity and Fitness Objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		e. Hispanic 18 years and over	1991	34%	...	...	---	---	---	31%	---	---	36%	---	25%
		f. American Indian/Alaska Native 18 years and over	1991	29%	...	...	---	---	---	23%	---	---	26%	---	21%
☐	1.6	**Muscular strength, endurance, and flexibility**													
		People 6 years and over	...	---	---	---	---	---	---	---	---	---	---	---	40%
		Students in grades 9–12													
		Strengthening 4 or more times per week	...	---	---	37%	---	39%	---	38%	---	38%	---	40%	...
		Stretching 4 or more times per week	...	---	---	43%	---	44%	---	41%	---	40%	---	---	...
		People 18–64 years													
		Weightlifting	1990	11%	...	16%	---	---	---	18%	---	---	19%	---	40%
		Stretching	...	---	---	27%	---	---	---	32%	---	---	32%	---	...
▨	1.7*	**Sound weight loss practices among overweight people 12 years and over**	...	---	---	---	---	---	---	---	---	---	---	---	50%
		Overweight male 18 years and over	1985	25%	22%	19%	---	17%	---	15%	---	---	15%	---	50%
		Overweight female 18 years and over	1985	30%	29%	22%	---	19%	---	19%	---	---	18%	---	50%
		a. Overweight Hispanic male 18 years and over	1991	15%	...	...	---	11%	---	13%	---	---	12%	---	24%
		b. Overweight Hispanic female 18 years and over	1991	13%	...	...	---	16%	---	16%	---	---	12%	---	22%
▨	1.8	**Daily school physical education**													
		Students in grades 1–12	1984–86	36%	---	---	---	---	---	---	---	---	---	---	50%
		Students in grades 9–12	...	---	---	42%	---	34%	---	25%	---	27%	---	29%	...
		Students in middle/junior high schools													
		For 1 year	...	---	---	---	---	---	12%	---	---	---	---	---	...
		For 2 or more years	...	---	---	---	---	---	30%	---	---	---	---	---	...
		Students in senior high schools													
		For 1 year	...	---	---	---	---	---	29%	---	---	---	---	---	...
		For 2 years	...	---	---	---	---	---	18%	---	---	---	---	---	...
		For 3 years	...	---	---	---	---	---	9%	---	---	---	---	---	...
☐	1.9	**Active physical education class time**													
		All students	1983	27%	---	---	---	---	---	---	---	---	---	---	50%
		Students in grades 9–12													
		21 or more minutes, 3–5 times per week	...	---	---	37%	---	35%	---	33%	---	32%	---	38%	...
		30 or more minutes, 1 or more times per week	...	---	---	24%	---	25%	---	22%	---	21%	---	26%	...
		Physical education teachers devoting more than one class period to:													
		Jogging	...	---	---	---	---	---	47%	---	---	---	---	---	...
		Tennis	...	---	---	---	---	---	30%	---	---	---	---	---	...
		Aerobic dance	...	---	---	---	---	---	30%	---	---	---	---	---	...
		Walking	...	---	---	---	---	---	15%	---	---	---	---	---	...
		Swimming	...	---	---	---	---	---	14%	---	---	---	---	---	...
☐	1.10	**Worksite fitness programs**													
		50–99 employees	1985	14%	---	---	33%	---	---	---	---	---	---	[7]38%	20%
		100–249 employees	1985	23%	---	---	47%	---	---	---	---	---	---	[7]42%	35%

See footnotes and key at end of table.

Table 1. Physical Activity and Fitness Objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		250–749 employees	1985	32%	---	---	66%	---	---	---	---	---	---	[7]56%	50%
		750 and more employees	1985	54%	---	---	83%	---	---	---	---	---	---	[7]68%	80%
		Group classes, workshops, or lectures	...	...	---	---	21%	---	---	19%	---	---	---	---	80%
☐	1.11	**Community fitness facilities**													
		Hiking, biking, and fitness trail miles	1986	1 per 71,000 people	---	---	---	---	---	---	---	---	---	---	1 per 10,000 people
		Public swimming pools	1986	1 per 71,000 people	---	---	---	---	---	---	---	---	---	---	1 per 25,000 people
		Acres of park and recreation open space	1986	1.8 per 1,000 people	---	---	---	---	---	---	---	---	---	---	4 per 1,000 people
☐	1.12	**Clinician counseling about physical activity**													
		Percent of sedentary patients	1988	30%	---	---	---	---	---	---	---	---	---	---	50%
		Percent of clinicians routinely providing services to 81–100% of patients													
		Inquiry about exercise habits													
		Pediatricians	...	---	---	---	16%	---	---	---	---	[8,9]---	---	---	50%
		Nurse practitioners	...	---	---	---	30%	---	---	---	---	[8]41%	---	---	50%
		Obstetricians/gynecologists	...	---	---	---	14%	---	---	---	---	[8,9]---	---	---	50%
		Internists	...	---	---	---	40%	---	---	---	---	[8,9]---	---	---	50%
		Family physicians	...	---	---	---	19%	---	---	---	---	[8,9]---	---	---	50%
		Formulation of an exercise plan													
		Pediatricians	...	---	---	---	16%	---	---	---	---	[8,9]---	---	---	50%
		Nurse practitioners	...	---	---	---	14%	---	---	---	---	[8]27%	---	---	50%
		Obstetricians/gynecologists	...	---	---	---	13%	---	---	---	---	[8,9]---	---	---	50%
		Internists	...	---	---	---	25%	---	---	---	---	[8,9]---	---	---	50%
		Family physicians	...	---	---	---	18%	---	---	---	---	[8,9]---	---	---	50%
☐	1.13*	**People with difficulty performing self-care activities** (per 1,000)													
		People 65 years and over	1984–85	111	---	---	---	---	---	---	---	---	---	---	90
		People 70 years and over	1984–85	[§]141	---	---	---	---	---	[10]163	---	---	---	---	90
		a. People 85 years and over	1984–85	371	---	---	---	---	---	[10]471	---	---	---	---	325
		b. Black 65 years and over	1984–85	[§]132	---	---	---	---	---	---	---	---	---	---	98
		Black 70 years and over	1984–85	[§]166	---	---	---	---	---	[10]218	---	---	---	---	98

--- Data not available.
... Category not applicable.
[§] Baseline has been revised.
[*] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.
[1] 1988–94 data.
[2] Data are for persons 20 years and over.
[3] 1988–91 data.
[4] Estimate derived from self-reported height and weight.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[5] Data are for persons 18–64 years.
[6] Operational definition changed from previous tracking data.
[7] 1998–99 data for percent of worksites that offered physical activity and/or fitness programs at the worksite or through their health plans.
[8] 1997–98 data.
[9] Response rate for this group was too low to produce reliable estimates.
[10] 1994–95 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
1.1*,1.1a	National Vital Statistics System, CDC, NCHS.
1.2*, 1.2a, b, f, g	National Health and Nutrition Examination Survey, CDC, NCHS.
1.2c, h	Data for Hispanic: National Health Interview Survey, CDC, NCHS.
	Baselines for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
1.2d	Baseline: IHS, OPEL.
	Updates: National Health Interview Survey, CDC, NCHS.
1.2e	National Health Interview Survey, CDC, NCHS.
1.3*, 1.3a	National Health Interview Survey, CDC, NCHS.
1.4	Baseline: For ages 10–17, National Children and Youth Fitness Study I, OPHS, ODPHP.
	1991–99 for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.
	Baseline and updates for ages 18 and over: National Health Interview Survey, CDC, NCHS.
1.4a–c	National Health Interview Survey, CDC, NCHS.
1.5, 1.5a–f	National Health Interview Survey, CDC, NCHS.
1.6	For students in grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.
	For people 18–64: National Health Interview Survey, CDC, NCHS.
1.7*, 1.7a–b	National Health Interview Survey, CDC, NCHS.
1.8	Baseline for grades 5–12: National Children and Youth Fitness Study I, OPHS, ODPHP.
	Baseline for grades 1–4: National Children and Youth Fitness Study II, OPHS, ODPHP.
	Baseline and updates for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.
	For students in middle/junior and senior high schools: School Health Policies and Programs Study, CDC, NCCDPHP.
1.9	Baseline for all students: Siedentop D. Developing Teaching Skills in Physical Education. Palo Alto, CA Mayfield. 1983.
	Data for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.
	For physical education teachers: School Health Policies and Programs Study, CDC, NCCDPHP.
1.10	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP.
	1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
	1998–99 data: National Worksite Health Promotion Survey, Association for Worksite Health Promotion.
1.11	Baseline: McDonald BL and Cordell HK. Local Opportunities for Americans: Final Report of the Municipal and County Park and Recreation Study, Alexandria, VA: National Recreation and Park Association. 1988.
1.12	Baseline: American College of Physicians Membership Survey of Prevention Practices in Adult Medicine.
	1992 data: Primary Care Provider Surveys, OPHS, ODPHP.
	1998 data: Prevention in Primary Care Study, American College of Preventive Medicine.
1.13*, 1.13a–b	National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.

* Duplicate objective. See full text of objective following this table.

Physical Activity and Fitness Objectives

1.1*: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 2.1, 3.1, and 15.1

1.1a*: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000.

Duplicate objectives: 2.1a, 3.1a, and 15.1a

1.2*: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

Duplicate objectives: 2.3, 15.10, and 17.12

1.2a*: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 2.3a, 15.10a, and 17.12a

1.2b*: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 2.3b, 15.10b, and 17.12b

1.2c*: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 2.3c, 15.10c, and 17.12c

1.2d*: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 2.3d, 15.10d, and 17.12d

1.2e*: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 2.3e, 15.10e, and 17.12e

1.2f*: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 2.3f, 15.10f, and 17.12f

1.2g*: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 2.3g, 15.10g, and 17.12g

1.2h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 2.3h, 15.10h, and 17.12h

1.3*: Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

Duplicate objectives: 15.11 and 17.13

1.3a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 15.11a and 17.13a

1.4: Increase to at least 20 percent the proportion of people aged 18 and older and to at least 75 percent the proportion of children and adolescents aged 6–17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

1.4a: Increase to at least 12 percent the proportion of lower-income people aged 18 and older (annual family income less than $20,000) who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

1.4b: Increase to at least 17 percent the proportion of blacks aged 18 and older who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

1.4c: Increase to at least 17 percent the proportion of Hispanics aged 18 and older who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

1.5: Reduce to no more than 15 percent the proportion of people aged 6 and older who engage in no leisure-time physical activity.

1.5a: Reduce to no more than 22 percent the proportion of people aged 65 and older who engage in no leisure-time physical activity.

1.5b: Reduce to no more than 20 percent the proportion of people with disabilities who engage in no leisure-time physical activity.

1.5c: Reduce to no more than 17 percent the proportion of lower-income people aged 18 and older (annual family income less than $20,000) who engage in no leisure-time physical activity.

1.5d: Reduce to no more than 20 percent the proportion of blacks aged 18 and older who engage in no leisure-time physical activity.

1.5e: Reduce to no more than 25 percent the proportion of Hispanics aged 18 and older who engage in no leisure-time physical activity.

1.5f: Reduce to no more than 21 percent the proportion of American Indians/Alaska Natives aged 18 and older who engage in no leisure-time physical activity.

1.6: Increase to at least 40 percent the proportion of people aged 6 and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility.

1.7*: Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7

1.7a*: Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7a

1.7b*: Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7b

1.8: Increase to at least 50 percent the proportion of children and adolescents in 1st–12th grade who participate in daily school physical education.

1.9: Increase to at least 50 percent the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities.

1.10: Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs as follows:

Worksites with—	2000 target (percent)
50–99 employees	20
100–249 employees	35
250–749 employees	50
750 or more employees	80

1.11: Increase community availability and accessibility of physical activity and fitness facilities as follows:

Hiking, biking, and fitness trail miles: 1 per 10,000 people

Public swimming pools: 1 per 25,000 people

Acres of park and recreation open space: 4 per 1,000 people (250 people per managed acre)

1.12: Increase to at least 50 percent the proportion of primary care providers who routinely assess and counsel their patients regarding the frequency, duration, type, and intensity of each patient's physical activity practices.

1.13*: Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3 and age-related objective for people aged 65 and older

1.13a*: Reduce to no more than 325 per 1,000 people the proportion of all people aged 85 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3a

1.13b*: Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3b

*Duplicate objective.

Priority Area 2 Nutrition

Background

Nutrition is essential for growth and development, health, and well being. Nutritional, or dietary, factors contribute substantially to the burden of preventable diseases and premature deaths in the United States (1). Dietary factors are associated with four of the leading causes of death: coronary heart disease, some types of cancer, stroke, and type 2 diabetes (2). These health conditions are estimated to cost society more than $200 billion annually in medical expenses and lost productivity (3). Dietary factors also are associated with osteoporosis, a condition that affects more than 25 million persons in the United States and is the major underlying cause of bone fractures in postmenopausal women and elderly persons (4).

In general, excesses and imbalances in some food components in the diet have replaced once commonplace nutrient deficiencies. The number of overweight and obese persons has increased substantially (5,6). Persons who are overweight or obese are at increased risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and certain cancers. The total costs (medical and lost productivity) attributable to obesity alone amounted to $99 million in 1995 (7). Overweight results when a person eats more calories from food (energy) than he or she expends, for example, through physical activity. Many factors influence this balance between energy intake and output including genetic, metabolic, environmental, and cultural factors.

The relationship between nutrition and health involves many dietary components. A primary concern is that many Americans consume too much saturated fat, and too few vegetables, fruits, and grain products that are high in vitamins, minerals, carbohydrates (starch and dietary fiber), and other substances that are important to good health. The *Dietary Guidelines for Americans* also recommend that consumers moderate their intake of total fat, sodium, and sugars, while at the same time obtain adequate amounts of other nutrients such as iron and calcium (8).

Data Summary

Highlights

The available data suggest that the majority of the 27 nutrition objectives either met or moved toward their year 2000 targets. However, for some objectives the progress was modest and for others there was movement away from the targets.

Throughout the 1990s, the Nation made steady gains in reducing deaths from coronary heart disease (**2.1**), stroke (**2.22**), all types of cancer (**2.2**), and colorectal cancer (**2.23**). The prevalence of high blood cholesterol (**2.25**) among people ages 20–74 years decreased to a level that met its target. Growth retardation among low-income children ages 5 years and under (**2.4**) exceeded its target, declining from 11 percent in 1987 to 8 percent in 1999. The percent of elementary and secondary schools offering low-fat choices for breakfast and lunch increased considerably (**2.17**), although, by the end of the decade, only about one in five schools offered lunches that met goals for total fat and saturated fat content.

Other nutrition objectives also showed improvement during the 1990s. The average fat intake among people ages 2 years and over declined and the proportion of the population who consumed no more than 30 percent of calories from fat increased (**2.5**). The availability of reduced-fat processed foods increased to such an extent that the 2000 target was surpassed early in the decade (**2.15**). Informative nutrition labeling (**2.14**) was found on more processed foods, fresh produce, and fresh seafood. Similar labeling of fresh meat and poultry, however, decreased.

Modest gains were also apparent in promoting consumption of fruits, vegetables, and grains. The average number of servings of vegetables and fruits consumed by the population increased as did the proportion of people who consumed at least five servings (**2.6**). For grain products, the year 2000 target was exceeded for both the average number of servings consumed and for the proportion of the population who consumed at least six servings (**2.6**). Despite this progress, a majority of Americans still did not consume the minimum recommended number of vegetable and fruit servings by the mid-1990s, nor did their vegetable and grain choices reflect sufficient variety.

Other objectives moved away from the year 2000 targets. The prevalence of overweight (**2.3**) increased substantially between 1976–80 and 1988–94. Preliminary analysis of data from the 1999 National Health and Nutrition Examination Survey (NHANES) suggests a continued increase in the prevalence of overweight and obesity. Additionally, the proportion of self-reported overweight males and females who report using exercise and diet to lose weight (**2.7**) decreased. Both the incidence and prevalence of diabetes (**2.24**) increased for the population as a whole and among the special population groups for which there are data—American Indians/Alaska Natives, Mexican Americans, and blacks.

Iron deficiency (**2.10**) increased in females of childbearing age (20–44 years) between 1976–80 and 1988–94. Further, no progress was observed in reducing the prevalence of iron deficiency among young children (1–4 years) overall, although the prevalence did decline for low-income children. An objective to increase the population's consumption of calcium-rich foods (**2.8**) also moved away from its target—only about 1 in 10 females ages 11–24 years consumed the recommended number of servings in the mid-1990s.

Summary of Progress

Of the 27 objectives that address nutrition, 6 objectives (**2.1**, **2.2**, **2.4**, **2.15**, **2.23**, and **2.25**) met or exceeded their year 2000 targets. Thirteen objectives (**2.5**, **2.6**, **2.11–2.13**, **2.16–2.20**, **2.22**, **2.26**, and **2.27**) moved toward the year 2000 targets. For two objectives (**2.9** and **2.14**), progress was mixed among the multiple measures used for tracking. Six objectives (**2.3**, **2.7**, **2.8**, **2.10**, **2.21**, and **2.24**) moved away from the targets. Although the objective status for **2.10** remained at baseline for young children, the overall status showed movement away from the target, because iron deficiency increased in females of childbearing age. The status of objective **2.21** (nutrition assessment, counseling, and referral) is based on a very small decline reported by nurse practitioners only. See table 2 for the tracking data for the objectives in this priority area and figure 2 for a quantitative assessment of progress.

Figure 2. Final status of Nutrition objectives

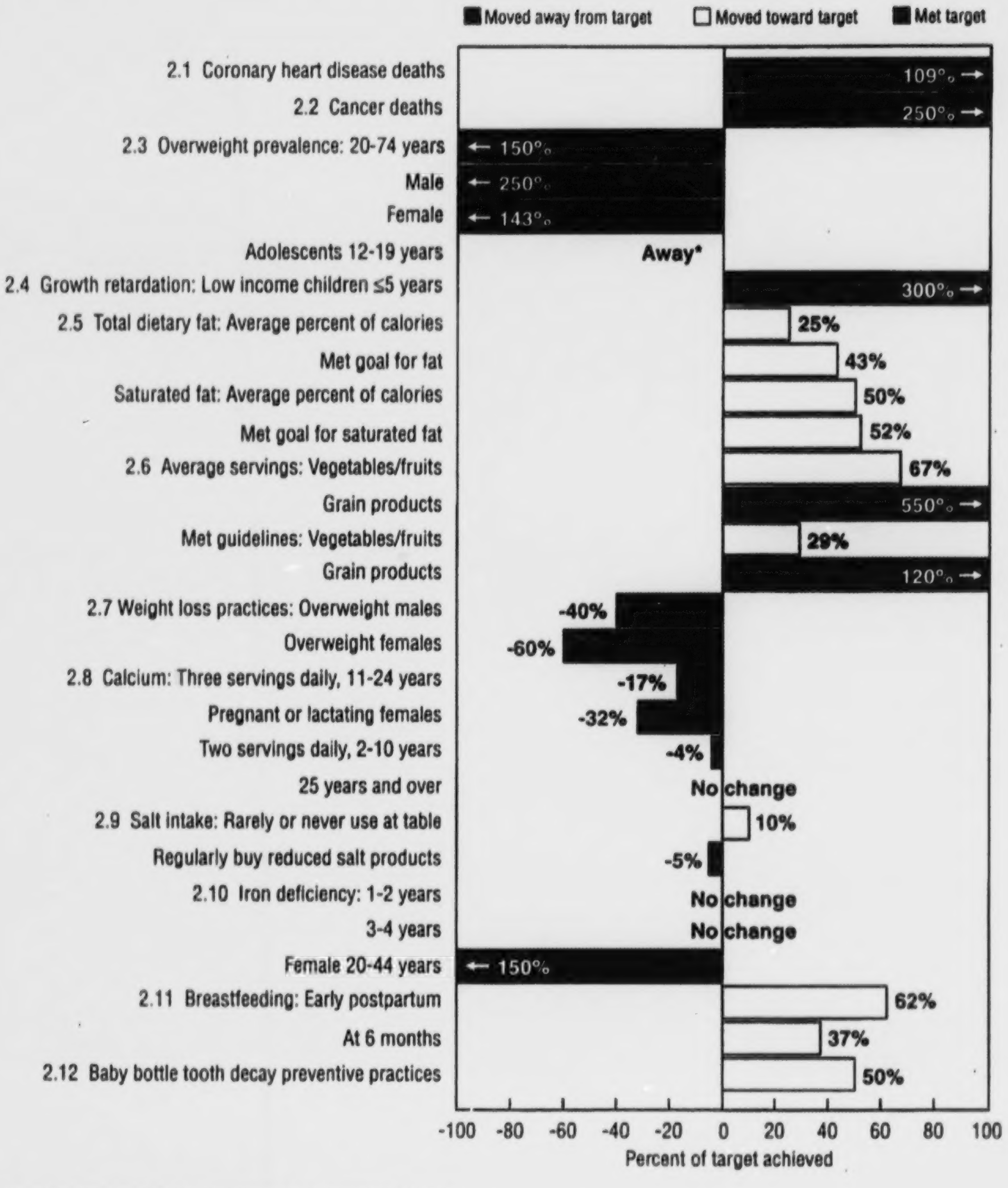
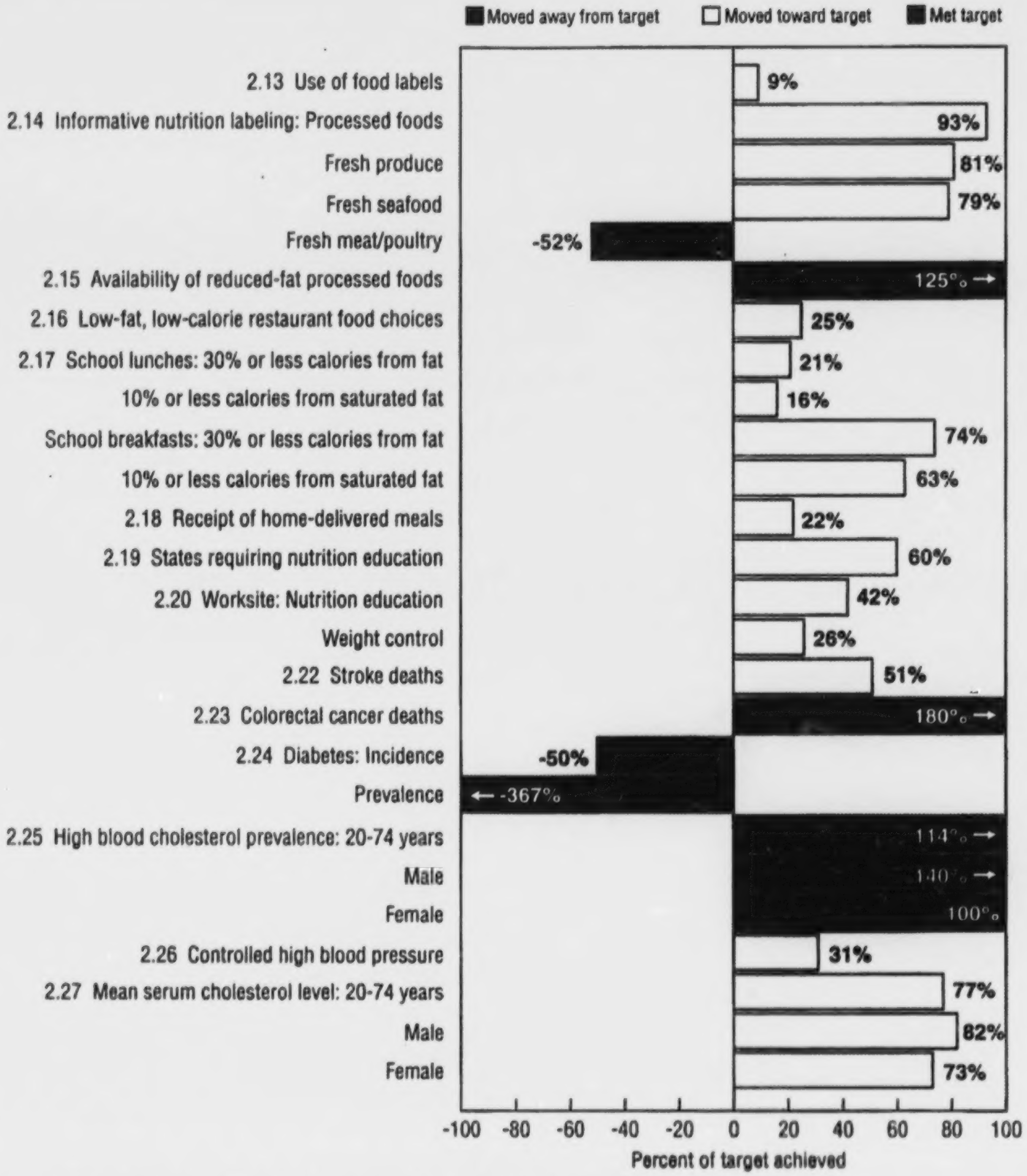


Chart continues onto next page – see notes at the end of the chart.

Figure 2b. Final status of Nutrition objectives—Con.



*This objective has moved away from its target. A progress quotient could not be calculated.
NOTE: Complete tracking data are shown in table 2. Progress quotients are not calculated for objective 2.21.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

Discussion

Potential factors influencing the decline in deaths from heart disease and stroke include the decline in the percent of persons with high blood cholesterol, and the increases in the proportion of people with controlled high blood pressure. Dietary factors and a number of other factors including medical treatment may have also influenced the decline in these death rates.

Legislative and regulatory initiatives also played a role in achieving progress on some of the nutrition objectives. For example, as a result of the passage of the Nutrition Labeling and Education Act of 1990 and the introduction of a new food label in 1993, nutrition information now appears on most processed packaged foods, along with credible health and nutrient content claims and standardized serving sizes. Further, at the start of the decade, almost no retail food stores voluntarily provided nutrition labeling for raw produce and raw seafood, whereas the available data suggest that the majority do so now. While these efforts have increased the availability of nutrition information and healthful foods sold in supermarkets, a significant challenge remains on these fronts for away-from-home foods purchased at fast-food outlets, restaurants, cafeterias, and other food service outlets.

Public-private sector partnerships such as the 5-A-Day for Better Health Program and the Dietary Guidelines Alliance have also been instrumental in achieving progress on the nutrition objectives. However, despite many efforts directed at healthful eating, the prevalence of people who are overweight has increased considerably, which also affects the rising incidence and prevalence of diabetes. Generous portion sizes combined with limited nutrition information for many foods purchased away from home may be partly responsible. Other factors, such as the sedentary lifestyle of many people in the United States, also likely influence this alarming trend.

Transition to *Healthy People 2010*

The *Healthy People 2000* nutrition chapter has been renamed in *Healthy People 2010* to "Nutrition and Overweight," providing for an increased focus on the achievement and maintenance of healthy weight (9). Overweight and obesity is the topic of one of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. Two objectives from the Nutrition and Overweight focus area—the proportion of children and adolescents who are overweight or obese and the proportion of adults who are obese—are used to measure this LHI. With the *Healthy People 2010* initiative, the prevalence of overweight among children will be tracked for the first time. Body Mass Index (BMI) cut points that will be used in *Healthy People 2010* to monitor prevalence of overweight and obesity have been changed to be consistent with recent national and international recommendations.

The *Healthy People 2010* chapter contains a section that lists objectives in other chapters that are related to the topics of nutrition and overweight. Objectives that address coronary heart disease, stroke, cancer, and diabetes, for example, appear in the chapters for Heart Disease and Stroke, Cancer, and Diabetes, respectively.

Other modifications have been made for consistency with the fifth edition of the *Dietary Guidelines for Americans* (8). For example, *Healthy People 2010* has set separate targets for fruits, vegetables and grains and placed increased emphasis on the quality of vegetables and grains consumed. In *Healthy People 2010*, there is a shift from estimating intake of calcium-rich foods (in the form of milk products) to estimating total calcium intake from all sources (including foods, dietary supplements, and antacids). There is also a shift from assessing salt use to estimating total sodium intake from a variety of sources (including foods, dietary supplements, tap water, and salt use at table). The iron deficiency and anemia objectives have been expanded to cover all pregnant women in addition to other vulnerable groups such as women of childbearing age and young children.

A *Healthy People 2010* developmental objective focuses on food actually eaten at school, recognizing increasing options available to children. School nutrition education is addressed along with broader school health education issues in the chapter on educational and community-based programs. *Healthy People 2010* also has two objectives that aim to promote nutrition education and weight management initiatives at the worksite and nutrition counseling in the health care setting.

Additionally, disparities in health status and risk factors for diet-related disease are key themes of the *Healthy People 2010* Nutrition and Overweight chapter. These are evident in many segments of the population based on gender, age, race and ethnicity, and income. For example, overweight and obesity are observed in all population groups, but obesity is particularly common among Hispanic and African American women.

Several of the *Healthy People 2000* objectives were dropped because they were achieved, were considered to be strategies for achieving other objectives, or had unreliable data sources. These objectives include weight loss practices, baby bottle tooth decay, use of food labels, nutrition labeling, restaurant/food service choices, and availability of low- or reduced-fat foods.

Finally, *Healthy People 2010* has a new objective aimed at increasing food security among U.S. households. This objective is a result of both increased recognition of the problem of food insecurity in the United States, and an improved ability to measure it.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

The death rates for coronary heart disease (**2.1**), stroke (**2.22**), cancer (**2.2**), and colorectal cancer (**2.23**) are age adjusted to the 1940 U.S. population (see Appendix for more information on age-adjusted rates). The National Cancer Institute age adjusts cancer deaths to the 1970 U.S. population. When the 1970 standard population is used, the equivalent baseline, interim, and target rates are all somewhat higher than those generated using the 1940 population, but the trends are very similar.

Coronary heart disease deaths (**2.1**) are defined by ICD–9 codes 402, 410–414, and 429.2. These codes are different from the codes used to define the category "Diseases of heart," which often appears in published tables (see Appendix and Appendix table II).

Overweight (**2.3**) for adults is defined as a BMI at or above the sex-specific 85th percentile of the 1976–80 National Health and Nutrition Examination Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives. BMI cutoff points for adults are 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. Current international research has indicated that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease in adults (5,6), and *Healthy People 2010* defines the upper limit of the healthy weight range for adults as a BMI of less than 25. For adolescents, overweight and obesity is defined as a BMI equal to or greater than 23.0 for males 12–14 years, 24.3 for males 15–17 years, 25.8 for males 18–19 years, 23.4 for females 12–14 years, 24.8 for females 15–17 years, and 25.7 for females 18–19 years. *Healthy People 2010* uses a BMI at or above the gender- and age-specific 95th percentile of BMI from the CDC growth charts for children and adolescents (10).

Growth retardation for objective **2.4** is defined as height-for-age below the fifth percentile of children in the National Center for Health Statistics' reference population derived from the 1971–74 National Health and Nutrition Examination Survey (NHANES I).

Estimates for objective **2.6** (fruit, vegetable, and grain intakes) exclude fruits and vegetables eaten as part of potato chips, condiments, fruit-flavored candies, jellies, and jams.

Updates for iron deficiency (**2.10**) from the 1988–94 NHANES III data were made as comparable as possible to the 1976–80 NHANES II estimates to allow for trend comparisons. Three methods are used to determine iron deficiency: mean corpuscular volume (MCV), erythrocyte protoporphyrin, and transferrin saturation. Iron deficiency is defined as having abnormal results for two or more methods. In 1988–94, MCV cutoff points were raised by one unit to account for differences in MCV values of the reference population at or below the median between NHANES II and NHANES III and known differences in hematocrit measurements (centrifugation in NHANES II versus electronic measurements in NHANES III) and possible methods differences in red blood cell counts (both surveys used electronic measurements but NHANES III data showed counts that appeared lower). Anemia is used as an index of iron deficiency. Anemia among Alaska Native children was defined as hemoglobin less than 11 gm/dL or hematocrit less than 34 percent. For pregnant women in the third trimester, anemia was defined according to CDC criteria.

For objective **2.11**, the definition used for breastfeeding includes exclusive use of human milk or the use of human milk with a supplemental bottle of formula or cow's milk.

Objective **2.12** addresses feeding practices that prevent baby bottle tooth decay. The measure used to establish a baseline for this objective for the total population, caregivers with less than a high school education (**2.12a**), blacks (**2.12c**), and Hispanics (**2.12d**) is for children 6–23 months old. For this objective, feeding practices to prevent baby bottle tooth decay include child no longer using a bottle, never used a bottle, or if the child is still using a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

Objective **2.14**, which targets nutrition labeling of food products; and labeling of fresh produce, fish, and meat and poultry, is measured by the percentage of retail food stores that provide nutrition labeling. In 1990, the Nutrition Labeling and Education Act mandated the periodic assessment of actions taken by food retailers to provide consumers with nutrition information for raw agricultural commodities and raw fish, in particular to determine whether food retailers could achieve and maintain substantial compliance with guidelines for a voluntary nutrition labeling program. Guidelines for the nutrition labeling of these raw foods were issued in November 1991. A baseline survey conducted in August and September 1991, before the guidelines were issued, determined that virtually no food retailers provided complete nutrition labeling for these foods. Baseline estimates for objective **2.14** published elsewhere (11,12) for fresh produce and fresh seafood have been revised based on this survey and a reinterpretation of the available data. The first followup survey to assess compliance with the final rule was conducted in November and December 1992. The dramatic increase from 1991 to 1992 in the percentage of retail food stores providing nutrition labeling information for raw produce and for raw fish represents a highly significant response to both the Nutrition Labeling and Education Act and the Food and Drug Administration's implementation of regulations.

High blood cholesterol (**2.25**) is defined as serum cholesterol levels of at least 240 mg/dL (13).

Objective **2.26** addresses the proportion of people with hypertension whose blood pressure is under control. High blood pressure is defined as blood pressure greater than or equal to 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as maintaining a blood pressure less than 140 mm Hg systolic and 90 mm Hg diastolic through the use of antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

Data Sources

Growth retardation among low-income children (**2.4**) and breastfeeding among American Indian/Alaska Native mothers (**2.11d**) are tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in the scope of surveillance could affect the comparability of estimates.

Data for **2.11** and **2.11a–c** are from the Ross Mothers' Survey (RMS) conducted by Abbot Laboratories. The RMS is an ongoing survey that is periodically mailed to a probability sample of new mothers selected from a list of names that represents approximately 80 percent of all national births. Mothers are asked to recall the type of milk their baby was fed in the hospital and in each subsequent month up to the month of the survey. Mothers are considered to be breastfeeding if they used either human milk exclusively or human milk in combination with a supplemental bottled formula or cow's milk.

In 1988–96, the questionnaires were mailed to mothers at the time their babies were 6 months old. In 1997 the methodology changed and questionnaires were mailed to a larger sample of mothers with babies 1–12 months of age. Therefore, although the overall sample grew to approximately double the pre–1997 size, the number in the sample for each month (including 6 months) became considerably smaller than that of previous years. This change affects the stability of the 6–month figures used to monitor this objective. Also beginning with data year 1997, the RMS no longer collects information on family income. Information on education of the mother is available from the survey to measure socioeconomic status.

The data on inquiry about diet and nutrition for objective **2.21** are from the Primary Care Provider Surveys (PCPS), which were drawn from a random stratified sample of members of the American College of Physicians from four geographic regions. Provider groups sampled included internists, pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. In 1992 response rates varied from 50 to 80 percent across these groups. The data on formulation of a diet and nutrition plan represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed a plan.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data for diabetes prevalence (**2.24** and **2.24e**) were tracked using the National Health Interview Survey (NHIS). Because of the NHIS redesign implemented in 1997, data collected in 1996 and earlier are not comparable with data from the redesigned NHIS (see Appendix). American Indian or Alaska Native data for 1996 for objective **2.24a** are from the Indian Health Service (IHS) Patient Comprehensive Care file. The file excludes data from 25 (representing 11 percent of the population served by IHS) of the 166 IHS service units because data were incomplete.

Data Comparability

Overweight (**2.3**) was tracked with two data sources. The primary data source is NHANES, which provided baselines and the 1988–94 updates for most of the overweight objectives and subobjectives; these data are derived from measured height and weight. The second data source is NHIS. This survey provides interim estimates shown in an earlier publication (14), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the measured data from NHANES: prevalence estimates of overweight from self-reported height and weight tend to be lower than estimates from measured height and weight. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase, however, differs in magnitude from that observed in the data derived from measured height and weight.

For the use of food labels by adults (**2.13**) the 1988 baseline data, and 1990, 1994, and 1995 updates are from the Food and Drug Administration's Health and Diet Survey. After being given a description of food labels, respondents were asked if they read food labels. The 1991, 1993, 1995, and 1998 updates are from the NHIS, which asked respondents how often they read food labels for calories, fat, and/or cholesterol content. Respondents answering "always," "often," or "sometimes" were considered to be making nutritious food selections using the food labels.

The 1985 and 1992 data for objective **2.20** are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive methods were included as worksite health promotion activities. The 1995 update is from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods (for example, brochures) of health promotion (15,16). The 1998–99 data are from the National Worksite Health Promotion Survey, which randomly sampled nongovernmental worksites of 50 or more employees in a particular geographic location. This telephone survey included questions regarding the offering of nutrition/cholesterol education or weight management programs for employees at the workplace or through health plans (17). The 1998–99 data are not comparable to the data that were collected earlier, although similar questions were asked.

Proxy Data

Objective **2.7** is to increase to at least 50 percent the proportion of overweight people who use sound dietary practices combined with regular physical activity to attain appropriate body weight. Respondents who reported they were overweight and were currently trying to lose weight or control their weight by eating fewer calories and exercising more were included in the numerator for this objective, although an assessment of the quality of dietary practices has not yet been integrated with a measure of regular physical activity. The 1985 and 1990 questionnaires asked respondents specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991, 1993, 1995, and 1998, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, "Are you currently doing any of these things to control your weight?" Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

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Table 2. Nutrition objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	2.1*	**Coronary heart disease deaths** (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	100	97	---	100
		a. Black	1987	168	158	156	151	154	147	147	140	136	133	---	115
■	2.2*	**Cancer deaths** (age adjusted per 100,000)	1987	134	135	135	133	133	132	130	128	126	124	---	130
		a. Black	1990	182	...	179	178	177	174	172	168	165	161	---	175
▨	2.3*	**Overweight prevalence** (based on measured height and weight unless otherwise indicated)													
		Adults 20–74 years	1976–80	26%	---	---	---	---	[1,2]35%	---	---	---	---	---	20%
		Male	1976–80	24%	---	---	---	---	[1,2]34%	---	---	---	---	---	20%
		Female	1976–80	27%	---	---	---	---	[1,2]37%	---	---	---	---	---	20%
		Adolescents 12–19 years	1976–80	15%	---	---	---	---	[1]24%	---	---	---	---	---	15%
		a. Low-income female 20–74 years	1976–80	37%	---	[3]47%	---	---	---	---	---	---	---	---	25%
		b. Black female 20–74 years	1976–80	44%	---	---	---	---	[1,2]52%	---	---	---	---	---	30%
		c. Hispanic female 20–74 years	...	---	---	---	---	---	---	---	---	---	---	---	25%
		Hispanic female 20 years and over[4]	...	---	33%	32%	32%	33%	32%	35%	---	[6]44%	[6]46%	---	...
		Mexican American female 20–74 years	1982–84	39%	---	---	---	---	[1,2]50%	---	---	---	---	---	...
		Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	---	---	...
		Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	---	---	...
		d. American Indian/Alaska Native 20 years and over	1984–88	29–75%	---	[4]40%	[4]36%	[4]48%	[4]34%	[4]43%	---	[6,4]46%	[6,4]45%	---	30%
		e. People with disabilities 20 years and over[4]	1985	36%	---	38%	37%	38%	38%	40%	---	---	---	---	25%
		f. Females with high blood pressure 20–74 years	1976–80	50%	---	---	---	---	---	---	---	---	---	---	41%
		g. Males with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	---	---	35%
		h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	[1,2]37%	---	---	---	---	---	25%
■	2.4	**Growth retardation among low-income children 5 years and under**	1988	11%	9%	9%	8%	8%	8%	8%	8%	8%	8%	8%	10%
		a. Low-income black children under 1 year	1988	15%	15%	15%	15%	16%	16%	15%	15%	15%	15%	15%	10%
		b. Low-income Hispanic children under 1 year	1988	13%	9%	8%	8%	7%	7%	7%	7%	7%	7%	7%	10%
		c. Low-income Hispanic children 1 year	1988	16%	12%	11%	9%	9%	8%	8%	8%	8%	8%	8%	10%
		d. Low-income Asian/Pacific Islander children 1 year	1988	14%	14%	13%	12%	11%	11%	12%	11%	11%	11%	10%	10%
		e. Low-income Asian/Pacific Islander children 2–4 years	1988	16%	14%	12%	11%	10%	10%	10%	9%	8%	8%	7%	10%
☐	2.5*	**Dietary fat intake among people 2 years and over**[5]													
		National Health and Nutrition Examination Survey													
		Average percent of calories from total fat	1976–80	[6]36%	---	---	---	---	[1]34%	---	---	---	---	---	30%
		Average percent of calories from saturated fat	1976–80	[6]13%	---	---	---	---	[1]12%	---	---	---	---	---	10%
		Percent who met goal for fat	1988–94	[9]27%	...	...	...	...	...	---	---	---	---	---	50%
		Percent who met goal for saturated fat	1988–94	[9]29%	...	...	...	...	...	---	---	---	---	---	50%
		Continuing Survey of Food Intakes by Individuals													
		Average percent of calories from total fat	1989–91	34%	...	...	---	---	33%	33%	33%	---	---	---	30%
		Average percent of calories from saturated fat	1989–91	12%	...	...	---	---	11%	11%	11%	---	---	---	10%
		Percent who met goal for fat	1989–91	22%	...	...	---	---	32%	33%	34%	---	---	---	50%
		Percent who met goal for saturated fat	1989–91	21%	...	...	---	---	34%	35%	36%	---	---	---	50%

See footnotes and key at end of table.

Table 2. Nutrition objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	2.6*	**Average daily intake of vegetables, fruits, and grain products among people 2 years and over**[5]													
		Average number of servings													
		Vegetables and fruits	1989–91	4.1	...	...	---	---	4.6	4.7	4.7	---	---	---	5.0
		Grain products	1989–91	5.8	...	...	---	---	6.7	6.8	6.9	---	---	---	6.0
		Proportion who met Dietary Guidelines goal													
		Vegetables and fruits	1989–91	29%	...	...	---	---	36%	37%	35%	---	---	---	50%
		Grain products	1989–91	40%	...	...	---	---	50%	53%	52%	---	---	---	50%
☐	2.7*	**Sound weight loss practices among overweight people 12 years and over**	...	---	---	---	---	---	---	---	---	---	---	---	50%
		Overweight male 18 years and over	1985	25%	22%	19%	---	17%	---	15%	---	---	15%	---	50%
		Overweight female 18 years and over	1985	30%	29%	22%	---	19%	---	19%	---	---	18%	---	50%
		a. Overweight Hispanic male 18 years and over	1991	15%	...	...	---	11%	---	13%	---	---	12%	---	24%
		b. Overweight Hispanic female 18 years and over	1991	13%	...	...	---	16%	---	16%	---	---	12%	---	22%
☐	2.8	**Foods rich in calcium (percent who consume)**[6]													
		Average of 3 or more servings daily													
		People 11–24 years	1989–91	20%	...	...	---	---	17%	16%	15%	---	---	---	50%
		Pregnant and lactating females[7]	1989–91	22%	...	...	---	---	20%	17%	13%	---	---	---	50%
		Average of 2 or more servings daily[8]													
		Children 2–10 years	1989–91	48%	...	...	---	---	42%	41%	47%	---	---	---	75%
		People 25 years and over	1989–91	21%	...	...	---	---	20%	20%	21%	---	---	---	50%
		Proportion who met average daily goal													
		a. Female 11–24 years	1989–91	13%	...	...	---	---	11%	10%	8%	---	---	---	50%
☐	2.9	**Salt and sodium intake (18 years and over)**													
		Prepare foods without adding salt	1989–90	43%	...	---	---	---	---	---	---	---	---	---	65%
		Rarely or never use salt at table	1989–91	60%	...	...	---	---	56%	58%	62%	---	---	---	80%
		Regularly purchase foods with reduced salt and sodium content	1988	20%	---	---	---	---	---	19%	---	---	---	---	40%
☐	2.10	**Iron deficiency prevalence**													
		Children 1–4 years	...	---	---	---	---	---	[1]6%	---	---	---	---	---	3%
		Children 1–2 years	1976–80	9%	---	---	---	---	[1]9%	---	---	---	---	---	3%
		Children 3–4 years	1976–80	4%	---	---	---	---	[1]4%	---	---	---	---	---	3%
		Females of childbearing age (20–44 years)	1976–80	5%	---	---	---	---	[1]8%	---	---	---	---	---	3%
		a. Low-income children 1–2 years	1976–80	21%	---	---	---	---	[1]13%	---	---	---	---	---	10%
		b. Low-income children 3–4 years	1976–80	10%	---	---	---	---	[1]8%	---	---	---	---	---	5%
		c. Low-income female 20–44 years	1976–80	8%	---	---	---	---	[1]12%	---	---	---	---	---	4%
		Anemia prevalence													
		d. Alaska Native children 1–5 years	1983–85	22–28%	[9]38%	[9]32%	[9]31%	[9]29%	[9]27%	[9]27%	---	---	---	---	10%
		e. Black, low-income pregnant females 15–44 years (third trimester)	1988	41%	41%	42%	43%	44%	43%	45%	46%	44%	44%	---	20%

See footnotes and key at end of table.

Table 2. Nutrition objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	2.11*	**Breastfeeding**													
		During early postpartum period[10]	1988	54%	52%	53%	54%	56%	57%	60%	59%	62%	64%	67%	75%
		a. Low-income mothers	1988	[§]34%	35%	33%	35%	38%	40%	42%	42%	46%	47%	49%	75%
		b. Black mothers	1988	25%	23%	26%	28%	31%	33%	37%	37%	41%	45%	50%	75%
		c. Hispanic mothers	1988	51%	48%	52%	52%	56%	58%	61%	61%	64%	66%	69%	75%
		d. American Indian/Alaska Native mothers	1988	47%	47%	46%	53%	51%	44%	52%	54%	56%	57%	62%	75%
		At age 6 months	1988	[§]20%	18%	18%	19%	19%	20%	22%	22%	26%	29%	31%	50%
		a. Low-income mothers	1988	9%	8%	8%	9%	10%	10%	11%	12%	20%	21%	20%	50%
		b. Black mothers	1988	[§]7%	6%	7%	8%	9%	10%	11%	11%	15%	19%	20%	50%
		c. Hispanic mothers	1988	[§]14%	13%	15%	16%	16%	18%	20%	20%	25%	28%	29%	50%
		d. American Indian/Alaska Native mothers	1988	28%	27%	22%	24%	28%	24%	24%	24%	25%	26%	27%	50%
☐	2.12*	**Baby bottle tooth decay**													
		Parents and caregivers who use preventive feeding practices	1991	55%	...	...	---	---	---	---	---	---	[11]65%	---	75%
		a. Parents and caregivers with less than high school education	1991	36%	...	...	---	---	---	---	---	---	[11]38%	---	65%
		b. American Indian/Alaska Native parents and caregivers	1985–89	74%	---	---	---	---	---	---	---	---	[11,12]...	---	65%
		c. Black parents and caregivers	1991	48%	...	...	---	---	---	---	---	---	[11]57%	---	65%
		d. Hispanic parents and caregivers	1991	39%	...	...	---	---	---	---	---	---	[11]46%	---	65%
☐	2.13	**Use of food labels among people 18 years and over**	1988	74%	76%	---	---	---	74%	75%	---	---	---	---	85%
		Read food labels for calories, fat, and/or cholesterol content	...	---	---	64%	---	66%	---	66%	---	---	61%	---	...
☐	2.14	**Informative nutrition labeling**													
		Processed foods	1988	60%	---	66%	---	76%	---	96%	---	97%	---	---	100%
		Fresh produce	1991	[§]Less than 1%	...	...	76%	---	75%	---	73%	---	---	---	90%
		Fresh seafood	1991	[§]0%	...	...	73%	---	75%	---	71%	---	---	---	90%
		Fresh meat/poultry	1995	[§]67%	...	...	...	...	...	...	58%	---	---	55%	90%
		Carry-away foods	...	---	---	---	---	---	---	---	---	---	---	40%	
■	2.15	**Availability of reduced-fat processed foods**	1986	2,500	---	5,618	---	---	---	---	---	---	---	---	5,000
☐	2.16	**Low-fat, low-calorie restaurant food choices**													
		Proportion of large chain restaurants offering at least one low-fat, low-calorie item	1989	70%	75%	---	---	---	---	---	---	---	---	---	90%
☐	2.17	**Nutritious school and child care food services**	...	---	---	---	---	---	---	---	---	---	---	---	90%
		Schools offering lunches with an average of:													
		30% or less of calories from total fat	1992	1%	...	...	...	---	---	---	---	---	---	20%	...
		Less than 10% of calories from saturated fat	1992	Less than 1%	...	...	...	---	---	---	---	---	---	15%	...

See footnotes and key at end of table.

Table 2. Nutrition objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Schools offering breakfasts in USDA program with an average of:													
		30% or less of calories from total fat	1992	44%	...	...	...	---	---	---	---	---	---	78%	...
		Less than 10% of calories from saturated fat	1992	4%	...	...	...	---	---	---	---	---	---	58%	...
		Schools with initiatives to reduce fat													
		Drained browned meat prior to serving	...	---	---	---	---	---	94%	---	---	---	---	---	...
		Spooned solid fat from chilled meat	...	---	---	---	---	---	79%	---	---	---	---	---	...
		Did not provide butter or margarine	...	---	---	---	---	---	31%	---	---	---	---	---	...
☐	2.18	**Receipt of home-delivered meals for people 65 years and over in need**	1991	[5]48%	...	...	---	48%	---	50%	---	---	55%	---	80%
☐	2.19	**Nutrition education in schools**	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Proportion of States requiring nutrition education	1990	60%	...	---	---	---	69%	---	---	---	---	---	...
		Nutrition education in at least one class:													
		Middle/junior high schools	...	---	---	---	---	---	83%	---	---	---	---	---	...
		Senior high schools	...	---	---	---	---	---	85%	---	---	---	---	---	...
☐	2.20	**Worksite nutrition/weight management programs**													
		Nutrition education	1985	17%	---	---	31%	---	---	---	---	---	---	---	50%
		Weight control	1985	15%	---	---	24%	---	---	---	---	---	---	---	50%
		Nutrition education and/or weight control	...	---	---	---	37%	---	---	---	---	---	---	---	50%
		Nutrition or cholesterol group classes, workshops, or lectures	...	---	---	---	17%	---	---	18%	---	---	---	[13]23%	50%
		Weight management group classes, workshops, or lectures	...	---	---	---	15%	---	---	14%	---	---	---	[13]15%	50%
☐	2.21	**Nutrition assessment, counseling, and referral by clinicians**	1988	40–50%	---	---	---	---	---	---	---	---	---	---	75%
		Percent of clinicians routinely providing service to 81–100 percent of patients													
		Inquiry about diet/nutrition													
		Pediatricians	...	---	---	---	53%	---	---	---	---	---	[14,15]...	---	75%
		Nurse practitioners	...	---	---	---	46%	---	---	---	---	---	[14]43%	---	75%
		Obstetricians/gynecologists	...	---	---	---	15%	---	---	---	---	---	[14,15]...	---	75%
		Internists	...	---	---	---	36%	---	---	---	---	---	[14,15]...	---	75%
		Family physicians	...	---	---	---	19%	---	---	---	---	---	[14,15]...	---	75%
		Formulation of a diet/nutrition plan													
		Pediatricians	...	---	---	---	31%	---	---	---	---	---	[14,15]...	---	75%
		Nurse practitioners	...	---	---	---	31%	---	---	---	---	---	[14]31%	---	75%
		Obstetricians/gynecologists	...	---	---	---	19%	---	---	---	---	---	[14,15]...	---	75%
		Internists	...	---	---	---	33%	---	---	---	---	---	[14,15]...	---	75%
		Family physicians	...	---	---	---	24%	---	---	---	---	---	[14,15]...	---	75%
☐	2.22*	**Stroke deaths** (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	25.9	25.1	---	20.0
		a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	42.5	41.4	---	27.0

See footnotes and key at end of table.

Table 2. Nutrition objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	2.23*	**Colorectal cancer deaths** (age adjusted per 100,000)	1987	14.7	13.8	13.5	13.2	13.1	13.0	12.8	12.3	12.1	12.0	---	13.2
		a. Black	1990	18.1	...	17.5	17.3	17.6	17.3	17.4	16.9	16.9	16.8	---	16.5
▨	2.24*	**Diabetes incidence and prevalence**													
		Total population (per 1,000)													
		Incidence of diabetes	1986–88	2.9	[16]2.6	[17]2.5	[18]2.4	[19]2.8	[20]3.1	[21]3.4	[22]3.1	---	---	---	2.5
		Prevalence of diabetes	1986–88	28	[16]26	[17]27	[18]28	[19]30	[20]30	[21]31	[22]31	‡38	‡39	---	25
		Prevalence of diabetes (per 1,000)													
		a. American Indian/Alaska Native 15 years and over in Indian Health Service areas	1987	69	---	---	---	---	---	---	[2]90	---	---	---	62
		b. Puerto Rican 20–74 years	1982–84	55	---	---	---	---	---	---	---	---	---	---	49
		c. Mexican American 20–74 years	1982–84	54	---	---	---	---	[1]66	---	---	---	---	---	49
		d. Cuban American 20–74 years	1982–84	36	---	---	---	---	---	---	---	---	---	---	32
		e. Black (all ages)	1986–88	36	[16]36	[17]36	[18]36	[19]38	[20]40	[21]42	[22]44	‡55	‡51	---	32
■	2.25*	**High blood cholesterol prevalence**													
		People 20–74 years	1976–80	27%	---	---	---	---	[1]19%	---	---	---	---	---	20%
		Male 20–74 years	1976–80	25%	---	---	---	---	[1]18%	---	---	---	---	---	20%
		Female 20–74 years	1976–80	29%	---	---	---	---	[1]20%	---	---	---	---	---	20%
☐	2.26*	**Controlled high blood pressure**													
		People with high blood pressure 18–74 years	1976–80	11%	---	---	---	---	[1]23%	---	---	---	---	---	50%
		a. Males with high blood pressure 18–74 years	1976–80	6%	---	---	---	---	[1]17%	---	---	---	---	---	40%
		b. Mexican Americans with high blood pressure 18–74 years	1988–94	§14%	...	...	...	...	...	---	---	---	---	---	50%
		c. Females with high blood pressure 70 years and over	1988–94	§19%	...	...	...	...	...	---	---	---	---	---	50%
☐	2.27*	**Mean serum cholesterol level (mg/dL)**													
		People 20–74 years	1976–80	213	---	---	---	---	[1]203	---	---	---	---	---	200
		Male 20–74 years	1976–80	211	---	---	---	---	[1]202	---	---	---	---	---	200
		Female 20–74 years	1976–80	215	---	---	---	---	[1]204	---	---	---	---	---	200

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

§Baseline has been revised.
‡The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.
[1] 1988–94 data.
[2] Data are for people 20 years and over.
[3] 1988–91 data.
[4] Estimate derived from self-reported height and weight.
[5] Estimates are from 1-, 2-, or 3-day dietary data.
[6] For people 2–74 years.
[7] Estimate may be unreliable because of small cell size and/or large coefficients of variation.
[8] Excluding pregnant/lactating females and breastfed children.
[9] Low-income children 1–4 years.
[10] Breastfed in hospital.
[11] Data are for children under 2 years. Baseline data are for children 6–23 months.
[12] Data are unreliable. Relative standard error is greater than 30%.
[13] 1998–99 data. Worksite location only.

[14] 1997–98 data.
[15] Response rate for this group was too low to produce reliable estimates.
[16] 1988–90 data.
[17] 1989–91 data.
[18] 1990–92 data.
[19] 1991–93 data.
[20] 1992–94 data.
[21] 1993–95 data.
[22] 1994–96 data.

NOTE: Data include revisions and, therefore, may differ from data previously published.

Objective number	*Data source*
2.1*, 2.1a	National Vital Statistics System, CDC, NCHS.
2.2*, 2.2a	National Vital Statistics System, CDC, NCHS.
2.3*, 2.3a, b, f, g	National Health and Nutrition Examination Survey, CDC, NCHS.
2.3c, h	Data for Hispanic: National Health Interview Survey, CDC, NCHS.
	Baselines for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
2.3d	Baseline: IHS, OPEL.
	Updates: National Health Interview Survey, CDC, NCHS.
2.3e	National Health Interview Survey, CDC, NCHS.
2.4, 2.4a–e	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.5*	1976–80 baselines and 1988–94 data: National Health and Nutrition Examination Survey, CDC, NCHS.
	1989–91 baselines and 1994–96 updates: Continuing Survey of Food Intakes by Individuals, USDA.
2.6*	Continuing Survey of Food Intakes by Individuals, USDA.
2.7*, 2.7a, b	National Health Interview Survey, CDC, NCHS.
2.8, 2.8a	Continuing Survey of Food Intakes by Individuals, USDA.
2.9	Preparing foods and use of salt at table: Continuing Survey of Food Intakes by Individuals, USDA.
	Purchasing reduced-salt foods: Health and Diet Survey, FDA.
2.10, 2.10a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
2.10d	Baseline: Survey of American Indians/Alaska Natives, CDC; IHS, OPEL.
	Updates: Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.10e	Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.
2.11*, 2.11a–c	Ross Laboratories Mothers Survey.
2.11d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.12*, 2.12a, c, d	National Health Interview Survey, CDC, NCHS.
2.12b	Baseline: 1990 Baby Bottle Tooth Decay 5-year Evaluation Report, IHS.
	Update: National Health Interview Survey, CDC, NCHS.
2.13	Use of food labels: Health and Diet Survey, FDA.
	Read food labels: National Health Interview Survey, CDC, NCHS.
2.14	Baseline and updates for processed foods: Food Label and Package Survey, FDA.
	Baselines and updates for fresh produce and seafood: Nutrition Labeling of Raw Produce and Raw Fish, FDA.
	Baseline for fresh meat/poultry: Nutritional Labeling/Safe Handling Information Study: Raw Meat and Poultry, USDA.
2.15	Nielsen Company National Scantrack.
2.16	Survey of Chain Operators, National Restaurant Association.
2.17	For lunches and breakfasts: School Nutrition Dietary Assessment Study I and II, USDA.
	For initiatives to reduce dietary fat: School Health Policies and Programs Study, CDC, NCCDPHP.

Objective number	Data source
2.18	National Health Interview Survey, CDC, NCHS.
2.19	Baseline: National Survey of School Health Education Activities, CDC, NCCDPHP. Update: School Health Policies and Programs Study, CDC, NCCDPHP.
2.20	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
2.21	1988 baseline: Lewis CE. Disease prevention and health promotion practices of primary care physicians in the United States. Am J Prev Med 4:9–16. 1988. 1992 data: Primary Care Provider Surveys, OPHS, ODPHP. 1998 data: Prevention in Primary Care Study, American College of Preventive Medicine.
2.22*, 2.22a	National Vital Statistics System, CDC, NCHS.
2.23*, 2.23a	National Vital Statistics System, CDC, NCHS.
2.24*, 2.24e	National Health Interview Survey, CDC, NCHS.
2.24a	Ambulatory Utilization Data, IHS.
2.24b–d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
2.25*	National Health and Nutrition Examination Survey, CDC, NCHS.
2.26*, 2.26a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
2.27*	National Health and Nutrition Examination Survey, CDC, NCHS.

* Duplicate objective.

Nutrition Objectives

2.1*: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 3.1, and 15.1

2.1a*: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 3.1a, and 15.1a

2.2*: Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

Duplicate objective: 16.1

2.2a*: Reverse the rise in cancer deaths to achieve a rate of no more than 175 per 100,000 blacks.

Duplicate objective: 16.1a

2.3*: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

Duplicate objectives: 1.2, 15.10, and 17.12

2.3a*: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 15.10a, and 17.12a

2.3b*: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 15.10b, and 17.12b

2.3c*: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 15.10c, and 17.12c

2.3d*: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 15.10d, and 17.12d

2.3e*: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 15.10e, and 17.12e

2.3f*: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 15.10f, and 17.12f

2.3g*: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 15.10g, and 17.12g

2.3h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 1.2h, 15.10h, and 17.12h

2.4: Reduce growth retardation among low-income children aged 5 and younger to less than 10 percent.

2.4a: Reduce growth retardation among low-income black children younger than age 1 to less than 10 percent.

2.4b: Reduce growth retardation among low-income Hispanic children younger than age 1 to less than 10 percent.

2.4c: Reduce growth retardation among low-income Hispanic children aged 1 to less than 10 percent.

2.4d: Reduce growth retardation among low-income Asian and Pacific Islander children aged 1 to less than 10 percent.

2.4e: Reduce growth retardation among low-income Asian and Pacific Islander children aged 2–4 to less than 10 percent.

2.5*: Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 15.9 and 16.7

2.6*: Increase complex carbohydrate and fiber-containing foods in the diets of people aged 2 and older to an average of five or more daily servings for vegetables (including legumes) and fruits, and to an average of six or more daily servings for grain products. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of five or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of six or more servings of grain products.

Duplicate objective: 16.8

2.7*: Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7

2.7a*: Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7a

2.7b*: Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7b

2.8: Increase calcium intake so at least 50 percent of people aged 11–24 and 50 percent of pregnant and lactating women consume an average of three or more daily servings of foods rich in calcium, and at least 75 percent of children aged 2–10 and 50 percent of people aged 25 and older consume an average of two or more servings daily.

2.8a: Increase calcium intake so at least 50 percent of females aged 11–24 consume an average of three or more daily servings of foods rich in calcium.

2.9: Decrease salt and sodium intake so at least 65 percent of home meal preparers prepare foods without adding salt, at least 80 percent of people avoid using salt at the table, and at least 40 percent of adults regularly purchase foods modified or lower in sodium.

2.10: Reduce iron deficiency to less than 3 percent among children aged 1 through 4 and among women of childbearing age.

2.10a: Reduce iron deficiency to less than 10 percent among low-income children aged 1–2.

2.10b: Reduce iron deficiency to less than 5 percent among low-income children aged 3–4.

2.10c: Reduce iron deficiency to less than 4 percent among low-income women of childbearing age.

2.10d: Reduce the prevalence of anemia to less than 10 percent among Alaska Native children aged 1–5.

2.10e: Reduce the prevalence of anemia to less than 20 percent among black, low-income pregnant women (third trimester).

2.11*: Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9

2.11a*: Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9a

2.11b*: Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9b

2.11c*: Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9c

2.11d*: Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9d

2.12*: Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11

2.12a*: Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11a

2.12b*: Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11b

2.12c*: Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11c

2.12d*: Increase to at least 65 percent the proportion of Hispanic parents and caregiverswho use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11d

2.13: Increase to at least 85 percent the proportion of people aged 18 and older who use food labels to make nutritious food selections.

2.14: Achieve useful and informative nutrition labeling for virtually all processed foods and at least 40 percent of ready-to-eat carry-away foods. Achieve compliance by at least 90 percent of retailers with the voluntary labeling of fresh meats, poultry, seafood, fruits, and vegetables.

2.15: Increase to at least 5,000 brand items the availability of processed food products that are reduced in fat and saturated fat.

2.16: Increase to at least 90 percent the proportion of restaurants and institutional food service operations that offer identifiable low-fat, low-calorie food choices, consistent with the Dietary Guidelines for Americans.

2.17: Increase to at least 90 percent the proportion of school lunch and breakfast services and child care food services with menus that are consistent with the nutrition principles in the Dietary Guidelines for Americans.

2.18: Increase to at least 80 percent the receipt of home food services by people aged 65 and older who have difficulty in preparing their own meals or are otherwise in need of home-delivered meals.

2.19: Increase to at least 75 percent the proportion of the Nation's schools that provide nutrition education from preschool–12th grade, preferably as part of comprehensive school health education.

2.20: Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees.

2.21: Increase to at least 75 percent the proportion of primary care providers who provide nutrition assessment and counseling and/or referral to qualified nutritionists or dietitians.

2.22*: Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 3.18 and 15.2

2.22a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 3.18a and 15.2a .

2.23*: Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 16.5

2.23a*: Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000.

Duplicate objective: 16.5a

2.24*: Reduce diabetes to an incidence of no more than 2.5 per 1,000 people and a prevalence of no more than 25 per 1,000 people.

Duplicate objective: 17.11

2.24a*: Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 17.11a

2.24b*: Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11b

2.24c*: Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11c

2.24d*: Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11d

2.24e*: Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11e

2.25*: Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 15.7

2.26*: Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4

2.26a*: Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4a

2.26b*: Increase to at least 50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4b

2.26c*: Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4c

2.27*: Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

Duplicate objective: 15.6

*Duplicate objective.

Priority Area 3
Tobacco

Background

Tobacco use is the single most preventable cause of death and disease in the Nation (1). Each year, it causes approximately one in five deaths (more than 430,000) in the United States (2). Tobacco use is associated with cancer, heart disease, chronic obstructive pulmonary disease, and stroke— 4 of the 5 leading causes of death (3). If current smoking patterns continue, an estimated 25 million persons in the United States who are alive today will die prematurely from smoking-related illnesses, including an estimated 5 million persons now under age 18 years (4).

Smoking contributes substantially to chronic disease and disability. It costs the Nation an estimated $50–$73 billion in medical expenses and $50 million in indirect costs (5, 6). The total smoking-attributable costs related to complicated births among pregnant smokers is an additional $1.4 billion (7). Cigarette smoking during pregnancy accounts for 17–26 percent of low-birthweight babies (8–10). The risks of tobacco use extend beyond the actual users. Nearly 9 of 10 nonsmoking U.S. residents are exposed to environmental tobacco smoke (ETS) (1). For adult nonsmokers, exposure to ETS increases the risk for lung cancer and heart disease (1, 11). Among children, exposure to ETS may cause serious respiratory problems (1, 11). In fact, substantial evidence now indicates that ETS exposure is associated with low birthweight and sudden infant death syndrome (11).

Other tobacco products also have significant health consequences (1). Use of smokeless tobacco is associated with leukoplakia, oral cancer, and halitosis. Periodontal degeneration and soft tissue lesions are early indicators of these conditions. Strong evidence also shows causal relationships between regular cigar use and cancers of the lungs, larynx, oral cavity, and esophagus.

Smoking among high school students increased significantly from approximately 28 percent in 1991 to 35 percent in 1999 (12). Among middle school students, 13 percent currently use some form of tobacco (cigarettes, smokeless tobacco, cigars, pipes, bidis, or kreteks) (13). Differences by racial and ethnic groups show that white teens are taking up smoking at higher rates than are black and Hispanic teens. Among teens who are regular smokers, one in three will ultimately die from smoking. Although recent studies indicate that current teen smoking may have leveled or begun to decline, a great deal of work is still needed to meet the health promotion and disease prevention objectives for the Nation (14).

The prevalence of smoking remains disproportionately high among some groups. For example, in 1998, more than one of three American Indians/Alaska Natives, people with low income, and people with less than a high school education smoked cigarettes (14).

Primarily, because tobacco use is addictive, of the nearly 70 percent of smokers who want to quit smoking completely, only 2.5 percent quit permanently each year (15). In the past, helping people quit smoking was the primary focus of efforts to reduce tobacco use, and it continues to be of great interest with the introduction and availability of new pharmacotherapies. This strategy is a critical one, since smoking cessation at all ages reduces the risk of premature death. More recently, this focus of tobacco control has expanded to include strategies to prevent individuals from ever starting to smoke. Such efforts have centered on young people, since the decision to use tobacco is usually made in the teenage years, and about one-half of young people who take up smoking continue to use tobacco products as adults. This preventive strategy also includes efforts to protect people from exposure to ETS. Finally, efforts to reduce tobacco use traditionally targeted individuals, but now the focus is on both individuals and communities.

Data Summary

Highlights

Great strides were made over the course of the decade for many of the national tobacco use objectives. All the objectives targeting mortality either met or moved toward their targets. Age-adjusted death rates from coronary heart disease (**3.1**) declined for the total population; the rate for blacks also declined, but at a slower rate than for the total population. Lung cancer (**3.2**) and chronic obstructive pulmonary disease death rates (**3.3**) slowed to rates below the *Healthy People 2000* targets after a rise in the previous decade. Although the death rate for lung cancer in women continued to rise, the rate of increase slowed sufficiently so that the year 2000 target was met. Oral cancer deaths among males and females ages 45–74 years (**3.17**) dropped over the course of the decade; for black males and females in this age group the decline in rates exceeded the decline in rates for the total population ages 45–74 years. The mortality rate for stroke also declined (**3.18**) and the subobjective for blacks showed considerable progress, narrowing the disparity with the total population.

Although the proportion of high school seniors reporting a perception of social disapproval for smoking cigarettes (**3.21**) declined, the average age of first use of cigarettes (**3.19**) increased to 12.4 years and the proportion of adolescents reporting use of cigarettes in the last month (**3.20**) dropped from a baseline of 22.7 percent in 1988 to 18.2 percent in 1998. Smokeless tobacco use declined among adolescent and young adult males, and the target set for adolescents ages 12–17 was met (**3.9**). Reports of perception of the harm caused by using smokeless tobacco (**3.22**) increased by about a third, from 30 percent in 1987 to 41 percent in 1999.

The majority of tobacco use objectives targeting institutions directly affecting youth have also shown improvement. Between 1988 and 1994, the number of school districts providing tobacco-free environments more than doubled, and the number of schools providing anti-smoking education also increased (**3.10**). All 50 States and the District of Columbia have enacted laws prohibiting the sale and distribution of tobacco products to youth under 18 years of age (**3.13**). Although these laws are often not strictly enforced (16), States are now required to demonstrate that they are enforcing their tobacco access laws in a manner that will reduce sales violation rates (17). The number of States with laws banning cigarette vending machines in areas accessible to minors increased from 12 in 1995 to 21 in 1999, but this increase was far shy of the target of all 50 States and the District of Columbia (**3.26**).

Cigarette smoking prevalence among adults (**3.4**) decreased for all

Figure 3. Final status of Tobacco objectives

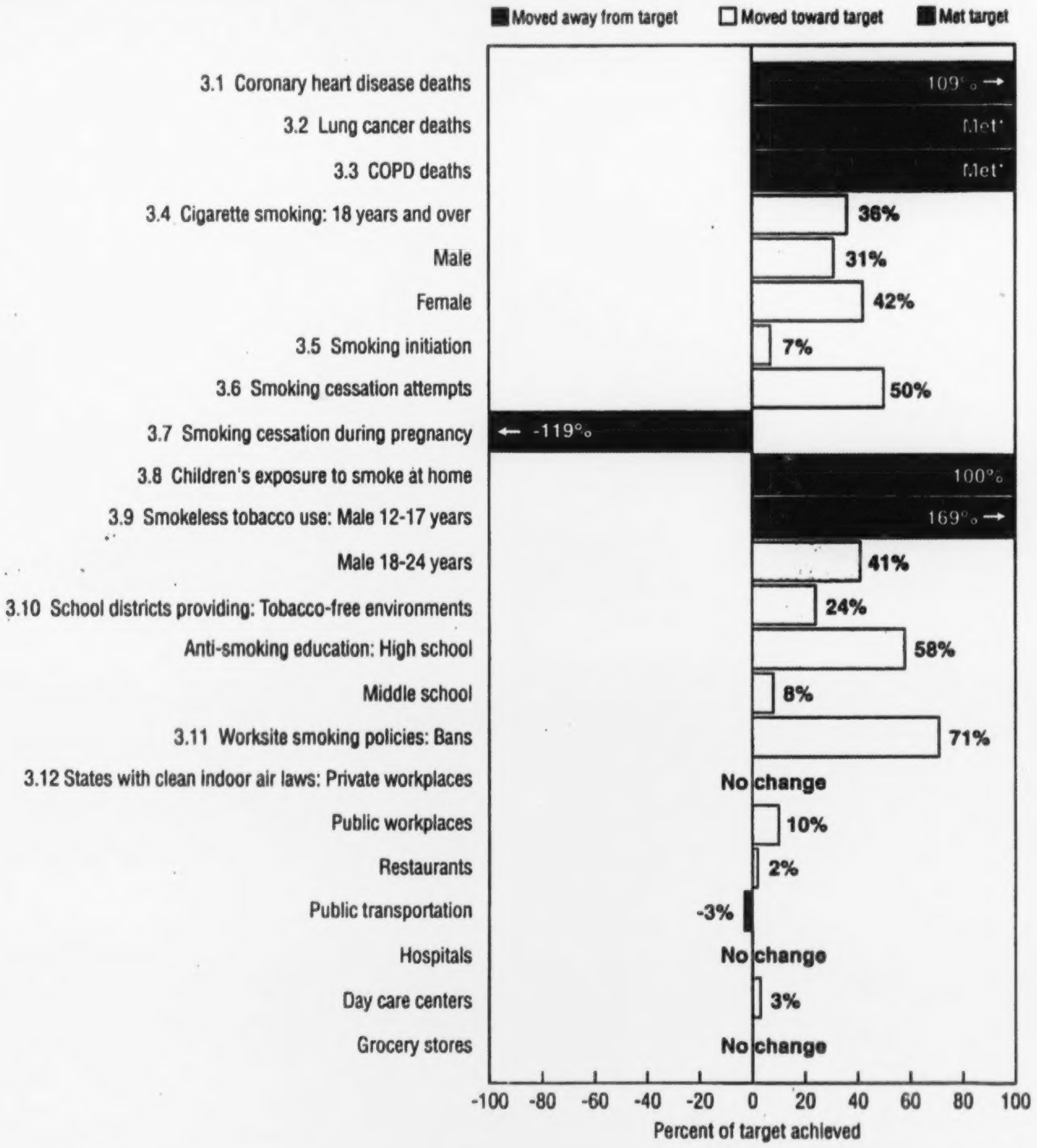

Chart continues onto next page – see notes at the end of the chart.

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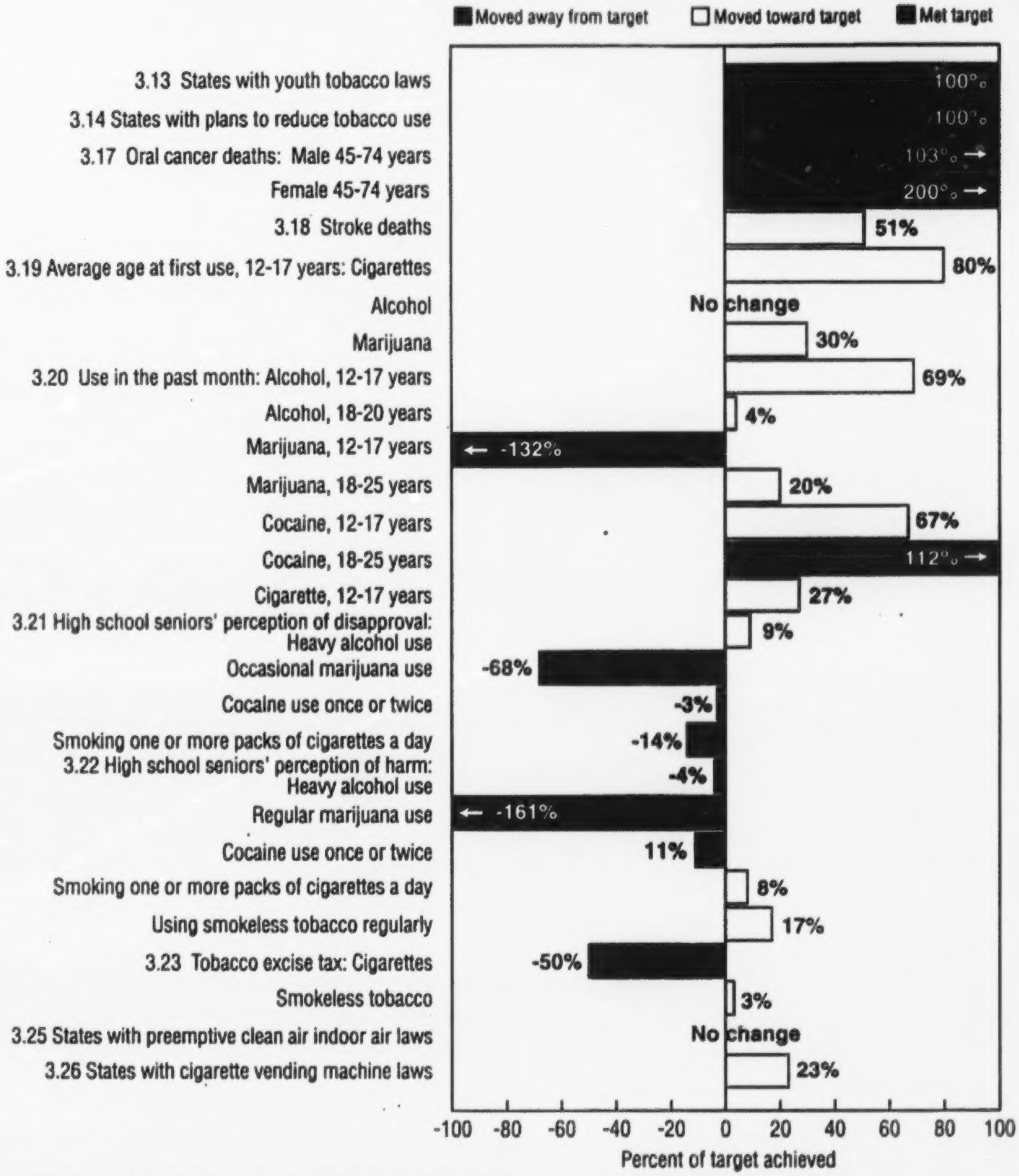
Figure 3. Final status of Tobacco objectives—Con.



*This objective has met its target. A progress quotient could not be calculated.
NOTE: Complete tracking data are shown in table 3. Progress quotients are not calculated for objectives 3.2, 3.3, 3.15, 3.16, and 3.24. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information. COPD is chronic obstructive pulmonary disease.

groups by 1993 and then leveled off. Smoking cessation attempts by adults (**3.6**) increased; however, they peaked in 1991 and have dropped since then. While the prevalence of smoking among pregnant women is relatively low and has been decreasing (18), smoking cessation among pregnant women who smoke (**3.7**) declined considerably over the decade. Children's exposure to smoke at home (**3.8**) was reduced over the course of the decade by about 50 percent.

The number of worksites with smoking policies increased, as did the number with actual bans (**3.11**). During the *Healthy People 2000* midcourse review, the target for this objective was increased from 75 percent of worksites to 100 percent. Had it not been changed, this objective would now be met.

All States now have tobacco control plans (**3.14**), while in 1989 only 12 States had such plans. The number of States with comprehensive laws for clean indoor air (**3.12**) increased, but only slightly. The objective to increase the average tobacco excise tax moved from a baseline of 31.4 percent to 22.1 percent at the end of the decade, away from the target of 50 percent of the average retail price of all cigarettes and smokeless tobacco (**3.23**).

Summary of Progress

Data are available to assess the progress of 24 of 26 objectives in the tobacco priority area. Seven objectives (**3.1–3.3**, **3.8**, **3.13**, **3.14**, and **3.17**) met their targets. Ten objectives (**3.4–3.6**, **3.9–3.11**, **3.16**, **3.18**, **3.19**, and **3.26**) showed progress. One objective (**3.25**) showed no change from the baseline measure. Five objectives (**3.12**, **3.20–3.22**, and **3.23**) showed mixed progress among the multiple measures used to track the objectives. One objective (**3.7**) moved away from the target. Progress for two objectives (**3.15** and **3.24**) could not be assessed because data were not available. See table 3 for the tracking data for the objectives in this priority area and figure 3 for a quantitative assessment of progress.

Discussion

While significant progress was made in reaching the year 2000 targets for this priority area's objectives, certain challenges and barriers may have contributed to preventing achievement of all objectives. The 1990s saw a great deal of change and progress in the area of tobacco control. However, some changes (for example, the Master Settlement Agreement, the FDA ruling, etc.) came during the latter half of the decade and, therefore, did not have an appreciable effect on measures of the *Healthy People 2000* objectives.

The past decade saw a number of demographic changes among tobacco users. The 24th Surgeon General's Report, *Tobacco Use Among U.S. Racial/Ethnic Minority Groups*, revealed rapid increases in smoking by teenagers from minority groups, a trend that threatens to reverse the progress made during the early 1990s against lung cancer among racial and ethnic minority populations. Although their smoking rates remain considerably lower than those of whites (whose rates increased and then began to level off during the 10 years), cigarette smoking among African American and Hispanic adolescents increased in the 1990s after several years of substantial declines (19).

The 1990s also saw changes in tobacco products being used. For example, there has been an increase in the use of products other than cigarettes. The most significant increase is in the use of cigars. In 1999, approximately 3.7 billion cigars were smoked in the United States (20). Cigar smoking, once primarily an activity of older men (21), is now an activity of teenagers, with an estimated 6 million 14–19 year olds reporting that they smoked a cigar during the previous year (22). In addition, approximately 2.7 percent of middle school students and 6.6 percent of high school students reported using smokeless tobacco in 1999 (13) . Other, more novel tobacco products are also being used, especially by young people. Data from 1999 indicate that use of products such as bidis (flavored cigarettes originally from India) and kreteks (clove cigarettes) was 2.4 percent and 1.9 percent, respectively, among middle school students (13). Among high school students, approximately 5 percent and 5.8 percent, respectively, use bidis and kreteks (13).

Financial and other resources for tobacco control have improved in recent years. In 1999, the U.S. Department of Health and Human Services (HHS) and other organizations in the health community developed a national tobacco control program. Prior to that time, activities to prevent tobacco use and promote smoking cessation were supported by smaller scale efforts sponsored by, among others, the National Cancer Institute, the Centers for Disease Control and Prevention (CDC), and the Robert Wood Johnson Foundation. In 1998 settlements between State attorneys general and the tobacco companies to recover Medicaid costs resulting from tobacco-related health problems provided additional resources for State-based tobacco control, although the use of this money for tobacco control purposes differs by State. The amount of money from the Master Settlement Agreement that is allocated to tobacco control efforts in each State may affect the success of the *Healthy People 2010* objectives.

In 1996 the Federal government issued evidence-based guidelines for smoking cessation (23) . The guidelines were updated in 2000 and are considered the standard of care for tobacco use treatment (15). Five pharmacologic treatments for nicotine dependence are now approved by the Food and Drug Administration (FDA). Access to treatment has increased because two of the products, the nicotine patch and gum, are over-the-counter therapies (24).

The 1990s saw the implementation of a number of regulations, some of which succeeded and others that failed. In 1995 measures to restrict young people's access to tobacco products were instituted in earnest through regulations proposed by the FDA in 1995 and, in 1996, the Synar Amendment to the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act. Recently, numerous health associations, nongovernmental organizations, and communities have also focused significant resources on preventing young people from starting to use tobacco.

In 1994 an FDA advisory committee concluded that tobacco is addictive and that nicotine is the drug in tobacco that causes addiction. At that time, an FDA regulation set 18 years as the minimum age at which a person can buy tobacco products and retailers are now required to check the identification of potential buyers under the age of 27 before selling them tobacco.

In the latter half of the 1990s, the Courts made several rulings related to the FDA's authority to regulate tobacco and its advertising. However, early in 2000 the Supreme Court ruled against the FDA, finding it lacked authority to regulate tobacco products.

In spite of Federal legislation in the mid and late 1990s to prohibit smoking in federally funded facilities and State legislation restricting smoking in public places, only 13 States limit smoking in public places and in worksites and few reported completely banning smoking or limiting it to separately ventilated areas in private workplaces or restaurants (14). As of 1998, only one State required worksites to designate separately ventilated smoking areas and only 20 States required worksites to separately designate smoking areas at all (14). Meanwhile, a growing number of workers are demanding protection from involuntary exposure to smoke and increasingly more employers are responding to their employees' concerns about involuntary exposure to smoke.

The Federal government took steps in 1997 to increase the excise tax on cigarettes. States also have authority to increase taxes. Those States that have increased taxes most significantly have seen drops in smoking rates in their States. Raising taxes is one of the most effective interventions to decrease tobacco use (1).

The tobacco industry continues to promote smoking (1) . Cigarettes remain one of the most heavily marketed consumer products. Even though cigarette advertisements are prohibited on television and radio, the decade saw an increasing trend in the amount spent on advertising and promotion. The Federal Trade Commission's most recent report shows that the tobacco industry spent $6.73 billion on advertising and promotion in 1998, a 19 percent increase from 1997 (25). Several States, Federal agencies, and other organizations conduct media campaigns against tobacco use. Although media campaigns have been shown to decrease tobacco initiation and use, resources for campaigns have been limited. Some changes are on the horizon since settlements made between the State attorneys general and the tobacco companies in 1998–99 included several important restrictions on tobacco advertising and promotion to young people.

Finally, in spite of the fact that the U.S. Surgeon General has indicated in a report that implementing effective educational programs for preventing tobacco use could postpone or prevent smoking onset in 20 percent to 40 percent of U.S. adolescents, data suggest that evidence-based curricula and national guidelines have not been widely adopted (1). Less than 5 percent of schools nationwide are implementing the major components of CDC's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction* (1).

Transition to *Healthy People 2010*

The year 2010 objectives are grouped in the same categories as those used in *Healthy People 2000* (tobacco use in population groups, cessation and treatment, exposure to secondhand smoke, and social and environmental changes). Each *Healthy People 2000* tobacco use objective was evaluated based on its policy and program importance and data availability, and public comments were taken into account in deciding what objectives to include in the 2010 chapter.

To avoid duplication of objectives across chapters, some topics previously included in the *Healthy People 2000* Tobacco Use chapter are only in the *Healthy People 2010* focus areas that were considered their "primary homes" (for example, the objectives for coronary heart disease deaths and stroke deaths are located only in the Heart Disease and Stroke chapter). Seven *Healthy People 2000* tobacco use objectives moved to other focus areas in *Healthy People 2010*. Prevalence measures were expanded to include cigarettes, spit tobacco, cigars, and other products. New objectives for *Healthy People 2010* address youth, not just adult, smoking cessation; nonsmokers exposed to tobacco smoke; laws on smoke-free indoor air for territories and Tribes; suspension or revocation of State retail licenses for violations of laws prohibiting the sale of tobacco to minors; tobacco advertising and promotions that influence adolescents and young adults; comprehensive, evidence-based tobacco control programs; and the establishment of a regulatory structure to monitor toxicity of tobacco products.

Tobacco-related objectives also appear in other *Healthy People 2010* chapters (for example, Access to Quality Health Services; Maternal, Infant, and Child Health; Environmental Health; and Oral Health). Age ranges and subgroups were expanded in *Healthy People 2010* to better focus on population disparities.

Tobacco use is the topic of two of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. Two objective measures from the *Healthy People 2010* Tobacco Use focus area—cigarette smoking by adolescents and cigarette smoking by adults—are used to measure the LHI on tobacco use, and an additional objective addressing nonsmokers exposed to environmental tobacco smoke is used to help measure the LHI for environmental quality.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Coronary heart disease deaths (3.1) were defined by ICD–9 codes 402, 410–414, and 429.2. These are different from the codes used to define the category "Diseases of heart" which often appears in published tables (see Appendix table IV).

Chronic obstructive pulmonary disease (COPD) deaths (3.3) include deaths due to chronic bronchitis, emphysema, asthma, and other chronic obstructive pulmonary diseases and allied conditions.

Beginning in 1992, the definition of current smoker (3.4) was modified to specifically include persons who smoked only some days. Prior to 1992, a current smoker was defined by the questions: "Have you ever smoked 100 cigarettes in your lifetime?" and "Do you smoke now?" In 1992, cigarette smoking data were collected for a half-sample of the National Health Interview Survey (NHIS) with half the respondents (one-quarter sample) using these two smoking questions and the other half of respondents (one-quarter sample) using a revised smoking question: "Do you smoke every day, some days, or not at all?" in place of the second question. The 1992 estimate combines data collected using both sets of questions.

Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the prevalence of smoking.

The baseline for objective **3.7** (cessation of cigarette smoking early in pregnancy, with abstinence throughout pregnancy) was from a 1986 telephone interview of white women selected from the respondents to the 1985 National Health Interview Survey (9). Beginning with 1991, progress toward the target was tracked using periodic supplements to the NHIS. The 1985 and 1991 surveys used different definitions for smoking before pregnancy and for the duration of quitting during pregnancy. The 1991 measure, which focused on women who quit during the first trimester, is closer to the intent of the objective but not comparable with the 1985 baseline that included women who quit at any time during their last pregnancy resulting in a live birth in the previous 5 years. The data for 1998 are defined similarly to the 1991 data. The denominator is women ages 18–49 years who had a live birth in the previous 5 years and smoked at any time during their pregnancy with their last child and the numerator is those women in the denominator who quit smoking in the first trimester and did not begin smoking again during the pregnancy.

For objective **3.8** (children's exposure to tobacco smoke at home), the numerator was the number of children 6 years and under living in households with a household resident who smoked inside the home 4 or more days each week. The denominator was the number of households with children ages 6 years and under.

Objective **3.25** sought to reduce the number of States with preemptive clean indoor air laws. Preemptive laws prevent local jurisdictions from enacting more stringent restrictions than the State law or restrictions that vary from the State law (26).

Data Sources

All data for objective **3.11** (worksite smoking policies) are from telephone surveys of nongovernment worksites of 50 or more employees. The 1985 and 1992 data for objective **3.11** were from the Public Health Service-sponsored National Survey of Worksite Health Promotion Activities. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update was from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (27,28). The 1998–99 data are from the National Worksite Health Promotion Survey. Like the 1992 survey, the designated respondent was asked if the worksite had a formal smoking policy that prohibits or severely restricts smoking at the worksite or on the job (29).

The National Household Survey on Drug Abuse (NHSDA) was used to measure objectives **3.9**, **3.19**, and **3.20** regarding substance use among adolescents and young people. Beginning in 1991, the survey was expanded to include college students living in residence halls. In 1994, an improved questionnaire and editing procedures were introduced, which affect comparability with previous years. Additionally, in 1994, data were collected for cigarettes using a self-administered questionnaire, unlike previous years when questions regarding cigarette smoking were asked by the interviewers. This change in questionnaire administration greatly increased the cigarette-use estimates among adolescents, most likely due to the increased confidentiality of the new methodology. The trend data for all substances in objective **3.20** have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1997.

Data for objective **3.16**, cessation counseling and followup by clinicians, were obtained from several different surveys, making statements about trends somewhat problematic. The 1986 baselines for dentists were obtained from the Statewide Survey of Dentists in Vermont, and the updates are from the National Survey of Dentists, sponsored by the University of Florida. The 1986 baseline for internists is from the American College of Physicians (ACP) Membership Survey of Prevention Practices in Adult Medicine. The sampling frame for internists in the 1992 Primary Care Provider Surveys (PCPS) contained a random stratified sample of ACP members drawn from four geographic regions with oversampling of female members, yielding an initial sample of 1,200 internists. Additional provider groups sampled in the 1992 PCPS included pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. Response rates varied from 50 to 80 percent across these groups. The PCPS data on inquiry for objective **3.16** refer to the proportion of providers who routinely provided service to 81–100 percent of their clients. Data on counseling about smoking cessation represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention. Reporting of counseling could have been independent of the assessment made by the clinician.

The American College of Physicians' Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the 1992 PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The providers were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Information on objective **3.9** (smokeless tobacco use by males ages 12–24 years) was tracked by two surveys. Males ages 12–17 years were tracked by the NHSDA. In this survey, smokeless tobacco use was defined as any use of snuff or chewing tobacco in the preceding month. For males ages 18–24 years, information was obtained from the NHIS. The NHIS defines a smokeless tobacco user as someone who has used either snuff or chewing tobacco at least 20 times and who currently uses either of these substances every day or some days, at the time of the survey. Information for males ages 18–25 years was also available from the NHSDA using the same definition as for those ages 12–17 years. According to the NHSDA, smokeless tobacco use among males ages 18–24 years showed a downward trend similar to that observed from the NHIS. The smokeless tobacco use prevalence estimate from NHSDA was higher than the NHIS estimate (11.7 percent compared with 8.2 percent, respectively, in 1992). Differences between the NHSDA and the NHIS may be due to differences in the definition of smokeless tobacco use between the two surveys and/or methodological differences in survey administration.

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Table 3. Tobacco objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
▨	3.1*	**Coronary heart disease deaths** (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	100	97	---	100
		a. Black	1987	168	158	156	151	154	147	147	140	136	133	---	115
▩	3.2*	**Slow the rise in lung cancer deaths** (age adjusted per 100,000)	1987	38.5	39.9	39.6	39.3	39.3	38.7	38.3	37.8	37.3	36.9	---	42
		a. Female	1990	25.6	...	25.8	26.3	26.5	26.6	26.9	26.8	26.9	27.0	---	27
		b. Black male	1990	86.1	...	83.1	81.2	80.7	77.6	75.7	73.4	70.5	68.5	---	91
■	3.3	**Slow the rise in chronic obstructive pulmonary disease deaths** (age adjusted per 100,000)	1987	18.9	19.7	20.1	19.9	21.4	21.0	20.8	21.0	21.1	21.3	---	25
☐	3.4*	**Cigarette smoking prevalence**													
		People 18 years and over	1987	29%	25%	26%	[1]27%	25%	26%	25%	---	[8]25%	[8]24%	---	15%
		Male	1987	31%	28%	28%	[1]29%	28%	28%	27%	---	[8]28%	[8]26%	---	15%
		Female	1987	27%	23%	23%	[1]25%	22%	23%	23%	---	[8]22%	[8]22%	---	15%
		a. People with high school education or less 20 years and over	1987	34%	31%	31%	[1]32%	30%	31%	30%	---	[8]31%	[8]31%	---	20%
		b Blue-collar workers 18 years and over	1987	41%	36%	36%	[1]36%	34%	39%	36%	---	[8]37%	[8]36%	---	20%
		c. Military personnel	1988	42%	---	---	[1]35%	---	---	32%	---	---	30%	---	20%
		d. Black 18 years and over	1987	33%	26%	29%	[1]28%	26%	27%	26%	---	[8]27%	[8]25%	---	18%
		e. Hispanic 18 years and over	1987	24%	23%	20%	[1]21%	20%	20%	18%	---	[8]20%	[8]19%	---	15%
		f. American Indian/Alaska Native 18 years and over	1979–87	[2]42–70%	38%	31%	[1]40%	39%	40%	35%	---	[8]32%	[8]37%	---	20%
		g. Southeast Asian male	1984–88	55%	[3]35%	[3]36–41%	---	---	---	---	---	---	---	---	20%
		h. Females of reproductive age (18–44 years)	1987	29%	26%	27%	[1]28%	26%	27%	26%	---	[8]26%	[8]25%	---	12%
		i. Pregnant females	1985	25%	19%	20%	---	20%	---	18%	14%	13%	13%	---	10%
		j. Females who use oral contraceptives	1983	36%	[4]26%	---	---	---	---	24%	---	---	---	---	10%
☐	3.5	**Smoking initiation by children and adolescents** (proxy 20–24 years)	1987	30%	26%	24%	28%	27%	30%	26%	---	[8]31%	[8]29%	---	15%
		a. Lower socioeconomic status people 20–24 years[5]	1987	40%	35%	33%	38%	38%	39%	31%	---	[8]44%	[8]42%	---	18%
☐	3.6	**Smoking cessation attempts**	1986	34%	---	56%	46%	47%	46%	46%	---	[8]44%	[8]42%	---	50%
☐	3.7	**Smoking cessation during pregnancy** (18–49 years)	1985	[6]39%	---	16%	---	---	---	---	---	---	14%	---	60%
		a. Females with less than a high school education	1985	[6]28%	---	[7]---	---	---	---	---	---	---	[7]---	---	45%
▩	3.8*	**Children's exposure to smoke at home** (6 years and under)	1986	39%	---	32%	---	27%	27%	---	---	---	20%	---	20%
☐	3.9*	**Smokeless tobacco use**													
		Male 12–17 years	1988	6.6%	---	5.3%	4.8%	3.9%	5.1%	4.9%	3.5%	3.7%	2.2%	---	4%
		Male 18–24 years	1987	8.9%	---	9.9%	8.2%	7.8%	6.9%	---	---	---	6.9%	---	4%
		a. American Indian/Alaska Native 18–24 years	1986–87	[2]18–64%	---	[7]---	[7]---	[7]---	[7]---	---	---	---	[7]---	---	10%

See footnotes and key at end of table.

Table 3. Tobacco objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	3.10	**Tobacco-use prevention education and tobacco-free schools**													
		School districts providing tobacco-free environments	1988	17%	---	---	---	---	[8]36.5%	---	---	---	---	---	100%
		School districts providing anti-smoking education													
		High school	1988	78%	---	---	---	---	90.7%	---	---	---	---	---	100%
		Middle school	1988	81%	---	---	---	---	82.5%	---	---	---	---	---	100%
		Elementary school	1988	75%	---	---	---	---	---	---	---	---	---	---	100%
☐	3.11	**Worksites with smoking policies**													
		Policy that bans smoking or limits it to separately ventilated areas													
		50 or more employees	1985	27%	---	---	59%	---	---	---	---	---	---	[9]79%	100%
		Any smoking policy													
		Medium and large companies	1987	54%	---	85%	---	---	---	---	---	---	---	---	100%
		50 or more employees	...	---	---	---	86%	---	---	87%	---	---	---	---	...
☐	3.12	**Number of States with comprehensive laws for clean indoor air[10]**													
		Private workplaces	1995	[5]1	...	...	...	...	...	...	1	1	1	---	51
		Public workplaces	1995	[5]9	...	...	...	...	...	...	9	12	13	---	51
		Restaurants	1995	2	...	...	...	...	...	...	3	3	3	---	51
		Public transportation	1995	[5]17	...	...	...	...	...	...	17	17	16	---	51
		Hospitals	1995	[5]8	...	...	...	...	...	...	8	8	---	---	51
		Day care centers	1995	21	...	...	...	...	...	...	21	21	22	---	51
		Grocery stores	1995	[5]4	...	...	...	...	...	...	4	4	4	---	51
■	3.13	**Number of States with tobacco product sale and distribution to youth laws[10]**	1990	45	...	50	50	51	51	51	51	51	51	51	51
		Number of States enforcing laws to achieve buy rates no higher than 20 percent	...	---	---	---	---	---	---	---	---	[11]4	---	---	...
■	3.14	**Number of States with plans to reduce tobacco use**	1989	12	---	---	[10]35	---	[10]39	---	[10]51	[10]51	[10]51	[10]51	51
☐	3.15	**Tobacco product advertising and promotion to youth**	1990	Minimal restrictions	...	---	---	---	---	---	---	---	---	---	Eliminate or severely restrict
☐	3.16	**Cessation counseling and followup by clinicians**													
		Percent of clinicians routinely providing service to at least 75% of patients													
		Inquiry about smoking													
		General dentists	1986	26%	---	---	---	---	32.8%	---	---	---	---	---	75%
		Advised patients about smoking (among patients reporting smoking)													
		General dentists	1986	35%	---	---	---	---	64.8%	---	---	---	---	---	75%
		Internists (including sub-specialists)	1986	52%	---	---	---	---	---	---	---	---	---	---	75%

See footnotes and key at end of table.

Table 3. Tobacco objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Inquiry about smokeless tobacco use													
		General dentists	...	---	---	---	---	---	14.4%	---	---	---	---	---	...
		Advised patients about smokeless tobacco use (among patients reporting smokeless tobacco use)													
		General dentists	...	---	---	---	---	---	75.0%	---	---	---	---	---	...
		Percent of clinicians routinely providing service to 81–100% of patients													
		Inquiry about tobacco use													
		Pediatricians	...	---	---	---	33%	---	---	---	---	---	[12,13]---	---	75%
		Nurse practitioners	...	---	---	---	51%	---	---	---	---	---	[12]66%	---	75%
		Obstetricians/gynecologists	...	---	---	---	49%	---	---	---	---	---	[12,13]---	---	75%
		Internists	...	---	---	---	75%	---	---	---	---	---	[12,13]---	---	75%
		Family physicians	...	---	---	---	59%	---	---	---	---	---	[12,13]---	---	75%
		Discussion of strategies to quit smoking	---												
		Pediatricians	...	---	---	---	19%	---	---	---	---	---	[12,13]---	---	75%
		Nurse practitioners	...	---	---	---	20%	---	---	---	---	---	[12]39%	---	75%
		Obstetricians/gynecologists	...	---	---	---	28%	---	---	---	---	---	[12,13]---	---	75%
		Internists	...	---	---	---	50%	---	---	---	---	---	[12,13]---	---	75%
		Family physicians	...	---	---	---	43%	---	---	---	---	---	[12,13]---	---	75%
■	3.17	**Oral cancer deaths** (per 100,000)													
		Male 45–74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	10.3	10.4	---	10.5
		Female 45–74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	3.5	3.4	---	4.1
		a. Black male 45–74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	20.6	21.0	---	26.0
		b. Black female 45–74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	5.2	4.6	---	6.9
☐	3.18	**Stroke deaths** (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	25.9	25.1	---	20.0
		a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	42.5	41.4	---	27.0
☐	3.19	**Average age of first use** (adolescents 12–17 years)													
		Cigarettes	1988	11.6	11.5	11.5	11.7	11.7	12.2	12.3	12.4	12.4	12.4	---	12.6
		Alcohol	1988	13.1	12.8	12.6	13.0	12.9	12.8	12.6	13.1	13.1	13.1	---	14.1
		Marijuana	1988	13.4	13.4	13.5	13.8	13.9	14.1	13.8	14.4	13.7	13.7	---	14.4
☐	3.20	**Use in past month by adolescents and young adults**[14]													
		Alcohol													
		12–17 years	1988	33.4%	32.5%	27.0%	20.9%	23.9%	21.6%	21.1%	18.8%	20.5%	19.1%	---	12.6%
		18–20 years	1994	54.6%	...	...	...	...	...	54.1%	50.1%	53.4%	53.5%	---	29.0%
		Hispanic 12–17 years	1988	31.9%	24.2%	28.3%	20.3%	22.0%	18.3%	18.7%	19.9%	18.8%	18.9%	---	12.0%
		Marijuana													
		12–17 years	1988	5.4%	4.4%	3.6%	3.4%	4.0%	6.0%	8.2%	7.1%	9.4%	8.3%	---	3.2%
		18–25 years	1988	15.3%	12.7%	12.9%	10.9%	11.1%	12.1%	12.0%	13.2%	12.8%	13.8%	---	7.8%

See footnotes and key at end of table.

Table 3. Tobacco objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Cocaine													
		12–17 years	1988	1.2%	0.6%	0.4%	0.3%	0.4%	0.3%	0.8%	0.6%	1.0%	0.8%	---	0.6%
		18–25 years	1988	4.8%	2.3%	2.2%	2.0%	1.6%	1.2%	1.3%	2.0%	1.2%	2.0%	---	2.3%
		Hispanic 12–17 years	1988	1.4%	2.0%	1.4%	1.3%	1.1%	0.7%	0.8%	1.1%	1.0%	1.4%	---	0.6%
		Hispanic 18–25 years	1994	2.2%	...	...	...	...	...	1.1%	2.1%	1.5%	2.7%	---	1.0%
		Cigarettes													
		12–17 years	1988	[§]22.7%	22.4%	20.9%	18.4%	18.5%	18.9%	20.2%	18.3%	19.9%	18.2%	---	6.0%
☐	3.21	**Perception of social disapproval by high school seniors**													
		Heavy use of alcohol	1989	56.4%	59.0%	58.1%	60.8%	58.5%	59.1%	58.0%	57.8%	56.4%	55.5%	57.6%	70%
		Occasional use of marijuana	1989	71.1%	76.4%	75.8%	79.2%	73.8%	69.1%	65.4%	63.1%	59.9%	60.4%	61.6%	85%
		Trying cocaine once or twice	1989	88.9%	90.5%	91.8%	92.2%	91.1%	91.4%	91.1%	89.2%	87.3%	88.8%	88.7%	95%
		Smoking one or more packs of cigarettes per day	1987	74.2%	75.3%	74.0%	76.2%	71.8%	72.4%	69.2%	69.3%	68.5%	69.0%	71.2%	95%
☐	3.22	**Perception of harm by high school seniors**													
		Heavy use of alcohol	1989	44.0%	47.1%	48.6%	49.0%	48.3%	46.5%	45.2%	49.5%	43.0%	43.8%	43.1%	70%
		Regular use of marijuana	1989	77.5%	77.8%	78.6%	76.5%	72.5%	65.0%	60.8%	59.9%	58.1%	58.5%	57.4%	90%
		Trying cocaine once or twice	1989	54.9%	59.4%	59.4%	56.8%	57.6%	57.2%	53.7%	54.2%	53.6%	54.6%	52.1%	80%
		Smoking one or more packs of cigarettes per day	1987	68.6%	68.2%	69.4%	69.2%	69.5%	67.6%	65.6%	68.2%	68.7%	70.8%	70.8%	95%
		Using smokeless tobacco regularly	1987	[§]30.0%	34.2%	37.4%	35.5%	38.9%	36.6%	33.2%	37.4%	38.6%	40.9%	41.1%	95%
☐	3.23	**Tobacco excise tax** (percent of retail price)													
		Cigarettes	1993	31.4%	...	...	...	...	31.0%	31.6%	30.5%	31.5%	28.2%	22.1%	50%
		Smokeless tobacco	1993	11.8%	...	...	...	...	---	13.8%	---	[15]13.0%	---	---	50%
☐	3.24	**Treatment for nicotine addiction**													
		Health plans offering treatment	1985	11%	---	---	---	---	---	---	---	---	---	---	100%
☐	3.25	**Preemptive clean indoor air laws**													
		States with laws	1995	17	...	...	...	...	...	...	17	17	17	17	0
☐	3.26	**Number of States with laws banning cigarette vending machines in areas accessible to minors**[9]	1995	[§]12	...	...	...	...	...	...	14	19	20	21	51

Final objective status: ▨ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

--- Data not available.
. . . Category not applicable.
[§] Baseline has been revised.
[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Technical Notes.
[1] In 1992, the definition of "current" changed to include "some days" (intermittent smoking).
[2] Estimates for different tribes.
[3] Vietnamese males only.
[4] 1988 data.
[5] Among people 20–24 years with a high school education or less.
[6] Baseline for white females 20–24 years.
[7] Data are unreliable. Relative standard error is greater than 30 percent.
[8] Middle/junior high and senior high schools only.
[9] 1998–99 data.
[10] Includes the District of Columbia.
[11] 1996–97 data.

[12] 1997–98 data.
[13] Response rate for this group was too low to produce reliable estimates.
[14] In 1994, estimates for drug use were restricted to a core set of questions in contrast to the coding procedure in prior years. The trend data have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1998.
[15] Method of calculation modified in 1997.

NOTE: Data include revisions and, therefore, may differ from data previously published.

Objective number	*Data source*
3.1*, 3.1a	National Vital Statistics System, CDC, NCHS.
3.2*, 3.2a, b	National Vital Statistics System, CDC, NCHS.
3.3	National Vital Statistics System, CDC, NCHS.
3.4*, 3.4a, b, d, e, h	National Health Interview Survey, CDC, NCHS.
3.4c	Baseline, 1992, and 1995 updates: Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD. 1998 update: DoD Survey of Health Related Behaviors, Research Triangle Institute.
3.4f	Baseline: CDC. Updates: National Health Interview Survey, CDC, NCHS.
3.4g	Baseline: Local surveys. 1990 update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. Western J Med 153:34–9. 1990. 1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporations. JAMA 227(21):1726–31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. AJPH 87(6):1031–4. 1997.
3.4i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS. 1993 update: National Health and Pregnancy Survey, NIH, NIDA. 1995 update: National Survey of Family Growth, CDC, NCHS. 1996–98 updates: National Vital Statistics System, CDC, NCHS.
3.4j	Baseline and 1988 update: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. 1995 update: National Survey of Family Growth, CDC, NCHS.
3.5, 3.5a	National Health Interview Survey, CDC, NCHS.
3.6	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Updates: National Health Interview Survey, CDC, NCHS.
3.7, 3.7a	National Health Interview Survey, CDC, NCHS.
3.8*	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Updates: National Health Interview Survey, CDC, NCHS.
3.9*	For males 18–24 years, National Health Interview Survey, CDC, NCHS. For males 12–17 years, National Household Survey on Drug Abuse, SAMHSA, OAS.
3.9a	Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHSR. Updates: National Health Interview Survey, CDC, NCHS.
3.10	Baseline: National Survey of School Districts' Nonsmoking Policies, NSBA, ACS, ALA, and AHA. Updates: School Health Policies and Programs Study, CDC, NCCDPHP.
3.11*	Baseline, 1991, and 1992 updates for worksites with 50 or more employees: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. 1998–99 data: National Worksite Health Promotion Survey, OPHS, ODPHP. For medium and large companies: Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.
3.12*	Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
3.13	Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF.

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Objective number	*Data source*
	Updates: Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
	1997 data for States enforcing laws: Synar Regulation Implementation: "Report to Congress on FY 1997 State Compliance," SAMHSA, February 1998.
3.14	Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF.
	1992 and 1994 updates: Association of State and Territorial Health Officials Survey of State Activities on Tobacco Prevention and
	1996 update: Office on Smoking and Health, CDC, NCCDPHP; Public Health Applications Branch, NIH, NCI; California Department of Health Services.
3.15	Federal Trade Commission data reported by Office on Smoking and Health, CDC, NCCDPHP.
3.16	Baseline for internists: Wells, et al. Physicians Practice Study, AJPH 76:1009–13. 1986.
	Baseline for dentists: Secker-Walker, et al. Statewide Survey of Dentists' Smoking Cessation Advice. JADA 118:37–40. 1989.
	Updates for dentists: National Survey of Dentists' and Hygienists' Tobacco Control Activities, University of Florida.
	1992 data for primary care providers: Primary Care Provider Surveys, OPHS, ODPHP.
	1997–98 data for primary care providers: Prevention in Primary Care Study, American College of Preventive Medicine.
3.17*, 3.17a–b	National Vital Statistics System, CDC, NCHS.
3.18*, 3.18a	National Vital Statistics System, CDC, NCHS.
3.19*	National Household Survey on Drug Abuse, SAMHSA, OAS.
3.20*	National Household Survey on Drug Abuse, SAMHSA, OAS.
3.21*	Monitoring the Future, NIH, NIDA.
3.22*	Monitoring the Future, NIH, NIDA.
3.23	"The Tax Burden on Tobacco," The Tobacco Institute, 1995, and the Office on Smoking and Health, CDC, NCCDPHP.
3.24	Gelb BD. Preventive Medicine and Employee Productivity. Harvard Business Review 64(2): 12. 1985.
3.25*	Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
3.26	Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.

* Duplicate objective.

Tobacco Objectives

3.1*: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 15.1

> **3.1a***: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.
>
> Duplicate objectives: 1.1a, 2.1a, and 15.1a

3.2*: Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

Duplicate objective: 16.2

> **3.2a***: Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.
>
> Duplicate objective: 16.2a
>
> **3.2b***: Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.
>
> Duplicate objective: 16.2b

3.3: Slow the rise in deaths from chronic obstructive pulmonary disease to achieve a rate of no more than 25 per 100,000 people.

3.4*: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 15.12 and 16.6

> **3.4a***: Reduce cigarette smoking to a prevalence of no more than 20 percent among people with a high school education or less aged 20 and older.
>
> Duplicate objectives: 15.12a and 16.6a
>
> **3.4b***: Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 18 and older.
>
> Duplicate objectives: 15.12b and 16.6b
>
> **3.4c***: Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.
>
> Duplicate objectives: 15.12c and 16.6c
>
> **3.4d***: Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.
>
> Duplicate objectives: 15.12d and 16.6d
>
> **3.4e***: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.
>
> Duplicate objectives: 15.12e and 16.6e
>
> **3.4f***: Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.
>
> Duplicate objectives: 15.12f and 16.6f
>
> **3.4g***: Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.
>
> Duplicate objectives: 15.12g and 16.6g
>
> **3.4h***: Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.
>
> Duplicate objectives: 15.12h and 16.6h
>
> **3.4i***: Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.
>
> Duplicate objectives: 15.12i and 16.6i
>
> **3.4j***: Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.
>
> Duplicate objectives: 15.12j and 16.6j

3.5: Reduce the initiation of cigarette smoking by children and youth so that no more than 15 percent have become regular cigarette smokers by age 20.

> **3.5a**: Reduce the initiation of cigarette smoking by lower socioeconomic status youth so that no more than 18 percent have become regular cigarette smokers by age 20.

3.6: Increase to at least 50 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for at least one day during the preceding year.

3.7: Increase smoking cessation during pregnancy so that at least 60 percent of women who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

> **3.7a**: Increase smoking cessation during pregnancy so that at least 45 percent of women with less than a high school education who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

3.8*: Reduce to no more than 20 percent the proportion of children aged 6 and younger who are regularly exposed to tobacco smoke at home.

Duplicate objective: 11.17

3.9*: Reduce smokeless tobacco use by males aged 12–24 to a prevalence of no more than 4 percent.

Duplicate objective: 13.17

> **3.9a***: Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.
>
> Duplicate objective: 13.17a

3.10: Establish tobacco-free environments and include tobacco-use prevention in the curricula of all elementary, middle, and secondary schools, preferably as part of comprehensive school health education.

3.11*: Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

Duplicate objective: 10.18

3.12*: Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.

Duplicate objective: 10.19

3.13: Enact in 50 States and the District of Columbia laws prohibiting the sale and distribution of tobacco products to youth younger than age 18. Enforce these laws so that the buy rate in compliance checks conducted in all 50 States and the District Columbia is no higher than 20 percent.

3.14: Establish in 50 States and the District of Columbia plans to reduce tobacco use, especially among youth.

3.15: Eliminate or severely restrict all forms of tobacco product advertising and promotion to which youth younger than age 18 are likely to be exposed.

3.16: Increase to at least 75 percent the proportion of primary care and oral health care providers who routinely advise cessation and provide assistance and followup for all of their tobacco-using patients.

3.17*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

Duplicate objectives: 13.7 and 16.17

3.17a*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.

Duplicate objectives: 13.7a and 16.17a

3.17b*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black females aged 45–74.

Duplicate objectives: 13.7b and 16.17b

3.18*: Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 2.22 and 15.2

3.18a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 2.22a and 15.2a

3.19*: Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.

Duplicate objective: 4.5

3.20*: Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes in the past month as follows:

Substance and age	2000 target (percent)
Alcohol:	
12–17 years	12.6
18–20 years	29.0
Marijuana:	
12–17 years	3.2
18–25 years	7.8
Cocaine:	
12–17 years	0.6
18–25 years	2.3

Use in past month	2000 target (percent)
Alcohol:	
Hispanic 12–17 years	12.0
Cocaine:	
Hispanic 12–17 years	0.6
Hispanic 18–25 years	1.0
Cigarettes:	
12–17 years	6.0

Duplicate objective: 4.6

3.21*: Increase the proportion of high school seniors who perceive social disapproval of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Occasional use of marijuana	85
Trying cocaine once or twice	95
Smoking one or more packs of cigarettes per day	95

Duplicate objective: 4.9

3.22*: Increase the proportion of high school seniors who associate physical or psychological harm with the heavy use of alcohol, occasional use of marijuana, experimentation with cocaine, or regular use of tobacco, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Regular use of marijuana	90
Trying cocaine once or twice	80
Smoking one or more packs of cigarettes per day	95
Using smokeless tobacco regularly	95

Duplicate objective: 4.10

3.23: Increase the average (State and Federal combined) tobacco excise tax to at least 50 percent of the average retail price of all cigarettes and smokeless tobacco.

3.24: Increase to 100 percent the proportion of health plans that offer treatment of nicotine addiction (e.g., tobacco use cessation counseling by health care providers, tobacco use cessation classes, prescriptions for nicotine replacement therapies, and/or other cessation services).

3.25*: Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.

Duplicate objective: 10.20

3.26: Enact in 50 States and the District of Columbia laws banning cigarette vending machines except in places inaccessible to minors.

* Duplicate objective.

Priority Area 4 Substance Abuse: Alcohol and Other Drugs

Background

Substance abuse and its related problems are among society's most pervasive health and social concerns. Each year, about 100,000 deaths in the United States are related to alcohol consumption (1). Illicit drug abuse and related acquired immunodeficiency syndrome (AIDS) deaths account for at least another 12,000 deaths. In 1995, the economic cost of alcohol and drug abuse was $276 billion (2). This represents more than $1,000 for every man, woman, and child in the United States to cover the costs of health care, motor vehicle crashes, crime, lost productivity, and other adverse outcomes of alcohol and drug abuse.

Data Summary

Highlights

Three of the 20 *Healthy People 2000* objectives have been met or surpassed. By 1996, all 50 States had established and were monitoring comprehensive plans to ensure that underserved populations had access to alcohol and drug treatment programs (**4.12**). In 1995, more than 90 percent of the worksites with 50 or more employees had adopted policies on alcohol and drugs (**4.14**), which exceeds the target of 60 percent.

Alcohol-related motor vehicle crash deaths (**4.1**) have declined dramatically from 9.8 deaths per 100,000 persons in 1987, when the baseline was established, to 5.8 per 100,000 in 1999. However, the target, which was revised downward from 8.5 to 5.5 during the *1995 Healthy People Midcourse Review* (3), was not met. This reduction has been attributed in part to the passage of State laws mandating administrative license revocation (**4.15**) and setting maximum blood alcohol concentration (BAC) levels of 0.08 percent for drivers 21 years and older and establishing zero tolerance for alcohol in the blood of drivers under the age of 21 years (**4.18**).

The cirrhosis death rate (**4.2**) has declined to an age-adjusted rate of 7.2 deaths per 100,000 persons, although the age-adjusted rate for American Indians/Alaska Natives remains significantly higher than that of other racial and ethnic groups. Progress has also been made on increasing the age of first use of cigarettes (**4.5**).

Past month use of illegal substances showed mixed results. Alcohol use by adolescents 12–17 years has declined substantially from 33.4 percent in 1988, when the baseline was established, to 19.1 percent in 1998 (**4.6**). Marijuana use for youths 12–17 years is more prevalent now than it was a decade ago, although use by this age group has been decreasing since 1997 (**4.6**). The problem of heavy drinking (**4.7**) persists among high school students in the 30–percent range and in the 40–percent range for college students.

Trends in the perceived harmfulness of different substances are also mixed (**4.10**). In recent years, high school seniors' perception of harm from regular marijuana use has declined substantially, moving away from the target despite initial improvements. While high school seniors' perception of harm from heavy alcohol use (**4.10**) increased somewhat in the early 1990s, it has subsequently declined, ending the decade largely unchanged from the baseline.

High school seniors' perception of social disapproval for heavy alcohol use has increased, while perceptions of social disapproval for regular use of marijuana, trying cocaine once or twice, smoking one or more packs of cigarettes per day, and using smokeless tobacco are generally moving away from their respective targets (**4.9**), resulting in a mixed assessment for this objective.

For the total population, rates of drug-related deaths (**4.3**) and drug abuse-related emergency department visits have increased (**4.4**).

Summary of Progress

Data to assess trends toward the year 2000 targets are available for 16 of the 20 objectives in the Substance Abuse priority area. The target for one objective (**4.12**) was met and the targets for two objectives (**4.11** and **4.14**) have been surpassed. Progress toward targets is shown for seven objectives (**4.1**, **4.2**, **4.5**, **4.7**, **4.8**, **4.15**, and **4.18**). Trends are generally moving away from targets for two objectives (**4.3** and **4.4**). Mixed results are shown for four objectives (**4.6**, **4.9**, **4.10**, and **4.19**). No updates are available for four objectives (**4.13**, **4.16**, **4.17**, and **4.20**). See table 4 for the tracking data for the objectives in this priority area and figure 4 for a quantitative assessment of progress.

Discussion

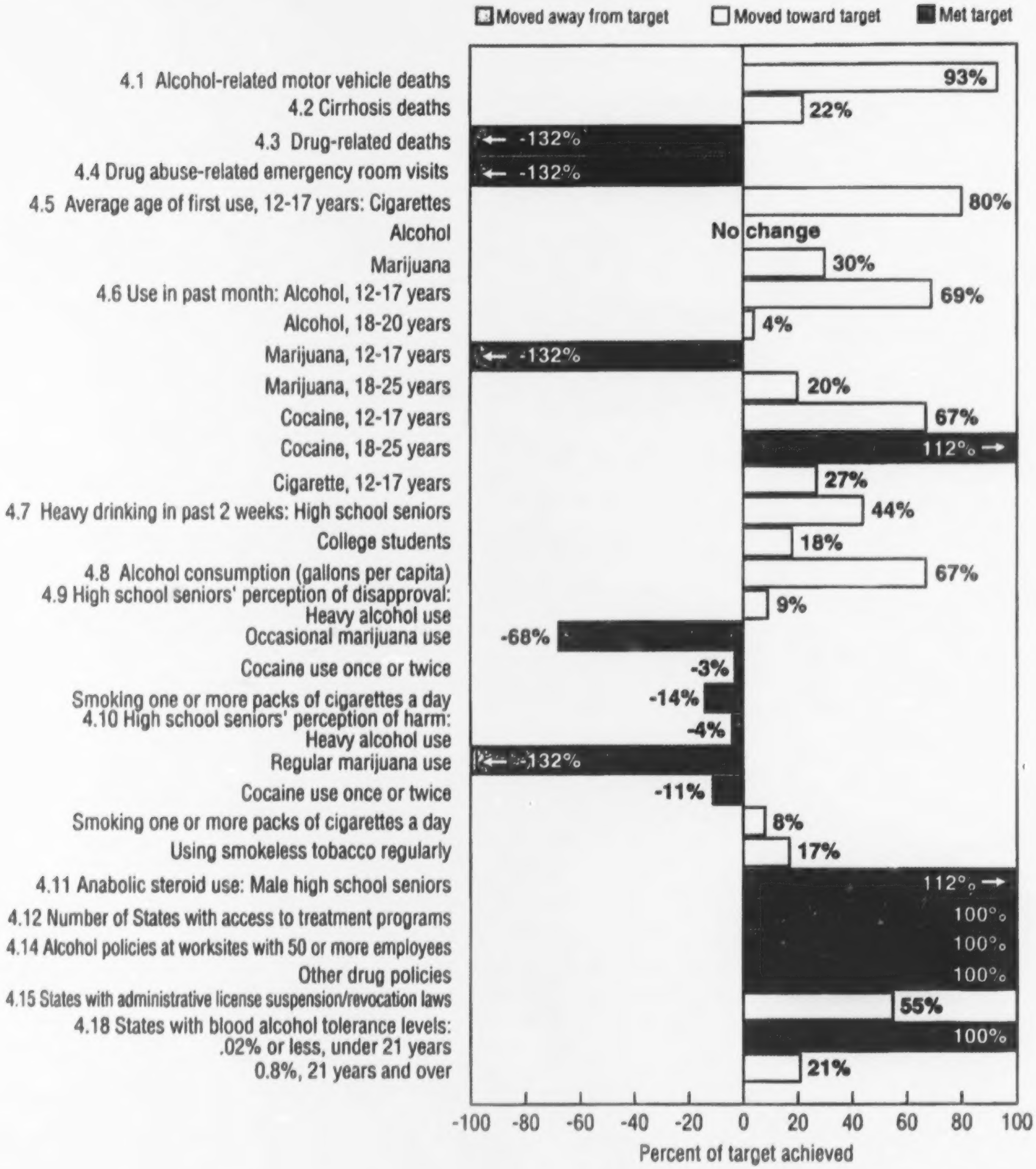
Twice in the 20th century, in the 1970s and again in the 1990s, drug use rose. In the later part of the 1980s, drug use fell, although illegal drug use never disappeared entirely. Beginning around 1990, teens and preteens began to adopt more permissive attitudes toward drugs. Soon thereafter, actions followed perceptions and the use of illegal drugs increased among young people 12–17 years. Supplemental data from 1999 indicate that 6.7 percent or 14.8 million Americans 12 years and over were current users of illicit drugs. This is down from 1979, when 14.1 percent of the U.S. population 12 years and over were current drug users (4) . By historical standards, present drug rates are relatively low. The fluctuation in trends reinforces the need for education as a continuous process for parents, communities, and policymakers, as well as for children.

The direct and indirect public health impact of substance abuse is widespread. Alcohol abuse and drug abuse among youth are strongly associated with risk-taking behavior, including sexual risk-taking behavior (5). Intravenous drug use is a major vector for the transmission of infectious diseases, including HIV/AIDS, hepatitis B and hepatitis C (6).

Alcohol consumption has significant adverse consequences for public health. Alcohol use has been linked with a substantial portion of injuries and deaths from motor vehicle crashes, falls, fires, and drownings (7). It is also a factor in homicide, suicide, marital violence, and child abuse (8). Excessive drinking has consequences for virtually every part of the body. Heavy alcohol use increases risk for cirrhosis and other liver disorders. Drinking also may increase the risk for developing cancer of the colon and rectum (9). Women's risk of developing breast cancer increases slightly if they drink two or more drinks per day (10).

The problem of heavy drinking persists among high school students and for college students. Recently enacted Federal law requires the withholding of

Figure 4. Final status of Substance Abuse: Alcohol and Other Drug objectives



NOTE: Complete tracking data are shown in table 4. Progress quotients are not calculated for objectives 4.13, 4.16, 4.17, 4.19, and 4.20. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

Federal highway funds from States that do not adopt a BAC of 0.08 percent as the standard for driving while intoxicated. Beginning in 2004, a gradually increasing percent of these funds (up to a maximum of 8 percent) will be withheld from States that fail to comply (11). In 1998, 16 States and the District of Columbia had 0.08 as their threshold BAC tolerance level for driving while alcohol-impaired.

Transition to *Healthy People 2010*

Healthy People 2010 increases the number of objectives related to substance abuse from 20 in *Healthy People 2000* to 25. Many of the objectives in *Healthy People 2000* are retained in *Healthy People 2010*, including objectives on alcohol-related motor vehicle crashes (**4.1**), cirrhosis deaths (**4.2**), drug-related (drug-induced) deaths (**4.3**), drug-related hospital emergency department visits (**4.4**), average age of first use (**4.5**), past month use of illicit substances by adolescents (**4.6**), binge drinking (**4.7**), alcohol consumption (**4.8**), peer disapproval of substance abuse (**4.9**), perception of risk (**4.10**), steroid use (**4.11**), administrative license revocation laws (**4.15**), and blood alcohol concentration levels (**4.18**).

Objectives related to the prevention of tobacco use included in the *Healthy People 2000* priority area have been reorganized into the Tobacco Use focus area in *Healthy People 2010*. Such a move, however, is not intended to lessen the understanding that the prevention and treatment of substance abuse requires that all abused substances be addressed—from tobacco and alcohol to marijuana and other illicit drugs.

In addition, several objectives have been added to *Healthy People 2010*. They include objectives dealing with drug-related motor vehicle crash deaths, injuries caused by alcohol-related motor vehicle crashes, injuries caused by drug-related motor vehicle crashes, alcohol-related emergency department visits, adolescents riding in a car with a driver who has been drinking, alcohol- and drug-related violence, lost productivity, adults exceeding guidelines for low-risk drinking, and inhalant use by adolescents. Also added are objectives related to the treatment gap for illicit drugs, treatment in correctional institutions, treatment for injection drug use, treatment gap for problem alcohol use, hospital emergency department referrals, and communities using partnerships or coalition models to conduct substance abuse prevention efforts.

Several objectives included in other focus areas of *Healthy People 2010* are directly related to the objectives included in the Substance Abuse focus area. For example, school health education and community health promotion programs (Educational and Community-Based Programs), AIDS among persons who inject drugs (HIV), deaths from unintentional injuries (Injury and Violence Prevention), fetal alcohol syndrome (Maternal, Infant, and Child Health), and primary care screening and assessment (Mental Health and Mental Disorders). All 21 objectives in the focus area on Tobacco Use are related to the Substance Abuse chapter, especially the objectives on adolescent tobacco use, initiation of tobacco use, age at first tobacco use, smoking cessation by adolescents, and adolescent disapproval of smoking.

Substance Abuse is one of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. Three objectives from the Substance Abuse focus area—adolescent use of alcohol or any illicit drug, adult use of any illicit drug, and binge drinking by adults—are used to measure this LHI.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

Definitions

All deaths attributed to chronic liver disease and cirrhosis (whether or not they are specified as alcohol related) are tracked in objective **4.2** as an indicator of abusive alcohol consumption. The entries on death certificates are often not specific enough to identify all alcohol-related liver disease deaths. Estimates of the proportion of the total chronic liver disease and cirrhosis deaths that are alcohol-related range from 41 to 95 percent (12).

Data from the National Vital Statistics System are used to track drug-related deaths (**4.3**). Although the objective discusses drug-related deaths, it is tracked by a category of deaths that is more accurately termed "drug-induced deaths." The category includes deaths whose underlying cause was drug dependence, nondependent use of drugs, and poisoning from drugs, all of which may include medically prescribed drugs. It excludes unintentional injuries, homicides, and other causes indirectly related to drug use. See Appendix table IV for a list of specific ICD–9 codes. This objective will continue to be tracked in *Healthy People 2010* with the more accurate title "drug-induced deaths."

Objectives **4.7**, **4.9**, and **4.10** refer to recent heavy drinking and heavy alcohol use. Heavy alcohol use is defined as having five or more drinks on one occasion. Recent heavy drinking is having five or more drinks on one occasion in the past 2 weeks.

Data Sources

Alcohol-related motor vehicle crashes (**4.1**) are tracked using data from the Department of Transportation's Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System) (FARS). The FARS supplements death certificate data with information on the circumstances of the death to determine whether the death was alcohol related. The National Vital Statistics System does not specify alcohol-related motor vehicle crashes.

The 1992 baselines for objective **4.14** are from the National Survey of Worksite Health Promotion Activities, which was a telephone survey of nongovernment worksites. Worksites were sampled, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update is from the Centers for Disease Control and Prevention (CDC) sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (13,14).

The 1992 data on inquiry about alcohol consumption and other drug abuse for objective **4.19** are from Primary Care Provider Surveys (PCPS).

The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on inquiry (from PCPS) about work-related risks represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98. The design and items included in the 1997–98 study were similar to the PCPS, but the sampling frame was slightly different and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

The National Household Survey on Drug Abuse (NHSDA) is used to measure objectives **4.5** and **4.6** regarding substance use among adolescents and young people. The targets for objective **4.6** are consistent with the goals established by the Office of the National Drug Control Policy, Executive Office of the President. Beginning in 1991, the NHSDA was expanded to include college students living in residence halls. Thus, results for people 18–25 years for marijuana and cocaine use and people 18–20 years for alcohol use are not directly comparable with measures from previous years. Additionally, improved questionnaire and editing procedures were introduced with the 1994 survey, which restricted determination of drug use to a core set of questions in contrast to a broader coding procedure in prior years. The trend data for all substances in objective **4.6** have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1998.

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Table 4. Substance Abuse: Alcohol and Other Drugs objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	4.1*	**Alcohol-related motor vehicle deaths** (per 100,000)	1987	9.8	8.9	7.9	7.0	6.8	6.4	6.6	6.5	6.1	5.9	5.8	5.5
		a. American Indian/Alaska Native male	1987	40.4	34.3	32.2	31.4	26.8	28.0	---	---	---	---	---	35.0
		b. People 15–24 years	1987	[§]20.9	18.6	17.2	14.2	13.2	13.0	12.8	12.9	11.7	11.7	11.5	12.5
☐	4.2	**Cirrhosis deaths** (age adjusted per 100,000)	1987	9.2	8.6	8.3	8.0	7.9	7.9	7.6	7.5	7.4	7.2	---	6
		a. Black male	1987	22.6	20.0	17.4	17.2	16.1	15.9	14.7	13.8	12.9	12.3	---	12
		b. American Indian/Alaska Native	1987	20.5	19.8	20.4	21.6	21.0	21.4	24.3	20.7	20.6	22.0	---	10
		c. Hispanic[1]	1990	[§]14.2	...	13.8	13.5	13.4	13.7	12.9	12.6	12.0	11.7	---	10
☐	4.3	**Drug-related deaths** (age adjusted per 100,000)	1987	3.8	3.6	3.8	4.3	4.8	5.0	5.1	5.2	5.6	5.9	---	3
		a. Black	1990	5.7	...	6.6	6.8	8.3	8.6	8.5	8.0	8.2	8.1	---	3
		b. Hispanic[1]	1990	4.3	...	3.9	5.6	6.4	6.0	6.0	5.9	5.7	5.9	---	3
☐	4.4	**Drug abuse-related emergency room visits** (per 100,000)	1991	175.8	...	...	191.4	203.9	225.2	222.5	207.2	221.5	225.4	228.2	140.6
☐	4.5*	**Average age of first use** (adolescents 12–17 years)													
		Cigarettes	1988	11.6	11.5	11.5	11.7	11.7	12.2	12.3	12.4	12.4	12.4	---	12.6
		Alcohol	1988	13.1	12.8	12.6	13.0	12.9	12.8	12.6	13.1	13.1	13.1	---	14.1
		Marijuana	1988	13.4	13.4	13.5	13.8	13.9	14.1	13.8	14.4	13.7	13.7	---	14.4
☐	4.6*	**Use in past month by adolescents and young adults**[2]													
		Alcohol													
		12–17 years	1988	33.4%	32.5%	27.0%	20.9%	23.9%	21.6%	21.1%	18.8%	20.5%	19.1%	---	12.6%
		18–20 years	1994	54.6%	...	...	...	...	...	54.1%	50.1%	53.4%	53.5%	---	29.0%
		Hispanic 12–17 years	1988	31.9%	24.2%	28.3%	20.3%	22.0%	18.3%	18.7%	19.9%	18.8%	18.9%	---	12.0%
		Marijuana													
		12–17 years	1988	5.4%	4.4%	3.6%	3.4%	4.0%	6.0%	8.2%	7.1%	9.4%	8.3%	---	3.2%
		18–25 years	1988	15.3%	12.7%	12.9%	10.9%	11.1%	12.1%	12.0%	13.2%	12.8%	13.8%	---	7.8%
		Cocaine													
		12–17 years	1988	1.2%	0.6%	0.4%	0.3%	0.4%	0.3%	0.8%	0.6%	1.0%	0.8%	---	0.6%
		18–25 years	1988	4.8%	2.3%	2.2%	2.0%	1.6%	1.2%	1.3%	2.0%	1.2%	2.0%	---	2.3%
		Hispanic 12–17 years	1988	1.4%	2.0%	1.4%	1.3%	1.1%	0.7%	0.8%	1.1%	1.0%	1.4%	---	0.6%
		Hispanic 18–25 years	1994	2.2%	...	...	...	...	...	1.1%	2.1%	1.5%	2.7%	---	1.0%
		Cigarettes													
		12–17 years	1988	22.7%	22.4%	20.9%	18.4%	18.5%	18.9%	20.2%	18.3%	19.9%	18.2%	---	6.0%
☐	4.7	**Heavy drinking in past 2 weeks**[3]													
		High school seniors	1989	33.0%	32.2%	29.8%	27.9%	27.5%	28.2%	29.8%	30.2%	31.3%	31.5%	30.8%	28.0%
		College students	1989	41.7%	41.0%	42.8%	41.4%	40.2%	40.0%	40.0%	38.3%	40.7%	38.9%	40.0%	32.0%
☐	4.8	**Alcohol consumption** (gallons per capita, persons 14 years and over)	1987	2.54	2.45	2.31	2.31	2.25	2.21	2.17	2.19	2.18	---	---	2.0
☐	4.9*	**Perception of social disapproval by high school seniors**													
		Heavy use of alcohol	1989	56.4%	59.0%	58.1%	60.8%	58.5%	59.1%	58.0%	57.8%	56.4%	55.5%	57.6%	70%
		Occasional use of marijuana	1989	71.1%	76.4%	75.8%	79.2%	73.8%	69.1%	65.4%	63.1%	59.9%	60.4%	61.6%	85%
		Trying cocaine once or twice	1989	88.9%	90.5%	91.8%	92.2%	91.1%	91.4%	91.1%	89.2%	87.3%	88.8%	88.7%	95%
		Smoking one or more packs of cigarettes per day	1987	74.2%	75.3%	74.0%	76.2%	71.8%	72.4%	69.2%	69.3%	68.5%	69.0%	71.2%	95%

See footnotes and key at end of table.

Table 4. Substance Abuse: Alcohol and Other Drugs objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	4.10*	**Perception of harm by high school seniors**													
		Heavy use of alcohol	1989	44.0%	47.1%	48.6%	49.0%	48.3%	46.5%	45.2%	49.5%	43.0%	43.8%	43.1%	70%
		Regular use of marijuana	1989	77.5%	77.8%	78.6%	76.5%	72.5%	65.0%	60.8%	59.9%	58.1%	58.5%	57.4%	90%
		Trying cocaine once or twice	1989	54.9%	59.4%	59.4%	56.8%	57.6%	57.2%	53.7%	54.2%	53.6%	54.6%	52.1%	80%
		Smoking one or more packs of cigarettes per day	1987	68.6%	68.2%	69.4%	69.2%	69.5%	67.6%	65.6%	68.2%	68.7%	70.8%	70.8%	95%
		Using smokeless tobacco regularly	1987	[5]30.0%	34.2%	37.4%	35.5%	38.9%	36.6%	33.2%	37.4%	38.6%	40.9%	41.1%	95%
■	4.11	**Anabolic steroid use**													
		Male high school seniors	1989	4.7%	5.0%	3.6%	3.5%	3.5%	3.8%	3.8%	3.2%	4.1%	2.8%	---	3.0%
■	4.12	**Number of States with access to treatment programs**	1996	50	...	...	...	...	...	...	...	50	50	50	50
☐	4.13	**Alcohol and drug education in schools**	1996	86%	...	...	...	...	...	...	...	---	---	---	100%
		Provided students with some instruction	1987	63%	---	---	---	---	---	---	---	---	---	---	100%
		Provided students with counseling	1987	39%	---	---	---	---	---	---	---	---	---	---	100%
		Referred students for clinical assessments	1987	23%	---	---	---	---	---	---	---	---	---	---	100%
		Provided students with instruction in at least one course													
		Middle/junior and senior high schools	...	---	---	---	---	---	90.4%	---	---	---	---	---	100%
■	4.14	**Worksite alcohol and drug policies 50 or more employees**	...	---	---	---	---	---	---	---	---	---	---	---	60%
		Alcohol	1992	88%	...	...	...	---	---	92%	---	---	---	---	60%
		Other drugs	1992	89%	...	...	...	---	---	96%	---	---	---	---	60%
☐	4.15	**Number of States with administrative license suspension/revocation laws[4]**	1990	29	...	30	---	35	38	---	---	40	41	---	51
☐	4.16	**Number of States with policies to reduce minors' access to alcohol**	1996	46	...	...	...	...	...	...	...	---	---	---	50
☐	4.17	**Number of States with restrictions on promotion of alcohol to children and adolescents**	1996	13	...	...	...	...	...	...	...	---	---	---	20
☐	4.18	**Number of States with blood alcohol concentration tolerance levels**													
		Zero tolerance (0.02% or less) for people under 21 years	1993	9	...	...	...	...	[4]21	---	[4]38	[4]46	[4]50	---	50
		0.08% for people 21 years and over	1993	7	...	...	...	...	11	---	14	15	16	---	50
☐	4.19	**Screening, counseling, and referral by clinicians**	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Percent of clinicians routinely providing service to 81–100% of patients													
		Inquiry about alcohol consumption (12 years and over)													
		Pediatricians	1992	29%	...	...	...	---	---	---	---	---	[5,6]...	---	75%
		Nurse practitioners	1992	45%	...	...	...	---	---	---	---	---	[5]52%	---	75%
		Obstetricians/gynecologists	1992	34%	...	...	...	---	---	---	---	---	[5,6]...	---	75%
		Internists	1992	63%	...	...	...	---	---	---	---	---	[5,6]...	---	75%
		Family physicians	1992	39%	...	...	...	---	---	---	---	---	[5,6]...	---	75%

See footnotes and key at end of table.

Table 4. Substance Abuse: Alcohol and Other Drugs objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Inquiry about other drug use (12 years and over)													
		Pediatricians	1992	28%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Nurse practitioners	1992	43%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5]36%	- - -	75%
		Obstetricians/gynecologists	1992	32%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Internists	1992	34%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Family physicians	1992	23%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Referral to alcohol treatment													
		Pediatricians	1992	26%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Nurse practitioners	1992	19%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5]22%	- - -	75%
		Obstetricians/gynecologists	1992	24%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Internists	1992	33%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Family physicians	1992	28%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Referral to drug abuse treatment													
		Pediatricians	1992	32%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Nurse practitioners	1992	19%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5]25%	- - -	75%
		Obstetricians/gynecologists	1992	28%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Internists	1992	35%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
		Family physicians	1992	28%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	75%
☐	4.20	**Number of States with Hospitality Resource Panels**	1994	8	. . .	. . .	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	30

- - - Data not available.
. . . Category not applicable.

Final objective status: ☐ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[#] Baseline has been revised.

[1] Excludes data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See Appendix.

[2] In 1994, estimates for drug use were restricted to a core set of questions in contrast to the coding procedure in prior years. The trend data have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1997.

[3] Recent heavy drinking is defined as having 5 or more drinks on 1 occasion in the previous 2-week period as monitored by self-reports.

[4] Includes the District of Columbia.

[5] 1997–98 data.

[6] Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
4.1*, 4.1b	Fatality Analysis Reporting System, DOT, NHTSA.
4.1a	Fatality Analysis Reporting System, DOT, NHTSA and National Vital Statistics System, CDC, NCHS.
4.2, 4.2a–c	National Vital Statistics System, CDC, NCHS.
4.3, 4.3a–b	National Vital Statistics System, CDC, NCHS.
4.4	Drug Abuse Warning Network, SAMHSA, OAS.
4.5*	National Household Survey on Drug Abuse, SAMHSA, OAS.
4.6*	National Household Survey on Drug Abuse, SAMHSA, OAS.
4.7	Monitoring the Future, NIH, NIDA.
4.8	Alcohol Epidemiology Data System, NIH, NIAAA.
4.9*	Monitoring the Future, NIH, NIDA.
4.10*	Monitoring the Future, NIH, NIDA.
4.11	Monitoring the Future, NIH, NIDA.
4.12	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.13	1987 baseline: Report to Congress and the White House on the Nature and Effectiveness of Federal, State, and Local Drug Prevention Education Programs. DOE. 1987. 1996 baseline: Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT. 1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
4.14	Baseline: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. Update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
4.15	Baseline: Office of Alcohol and State Programs, DOT, NHTSA. Updates: Office of Safety Recommendations, DOT, NHTSA.
4.16	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.17	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.18	Baseline: Office of Alcohol and State Programs, DOT, NHTSA. Updates: Office of Safety Recommendations, DOT, NHTSA.
4.19	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
4.20	California Coordinating Council on Responsible Beverage Service, National Survey Report.

* Duplicate objective.

Substance Abuse: Alcohol and Other Drugs Objectives

4.1*: Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 9.23

4.1a*: Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 9.23a

4.1b*: Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 9.23b

4.2: Reduce cirrhosis deaths to no more than 6 per 100,000 people.

4.2a: Reduce cirrhosis deaths among black men to no more than 12 per 100,000.

4.2b: Reduce cirrhosis deaths among American Indians and Alaska Natives to no more than 10 per 100,000.

4.2c: Reduce cirrhosis deaths among Hispanics to no more than 10 per 100,000.

4.3: Reduce drug-related deaths to no more than 3 per 100,000 people.

4.3a: Reduce drug-related deaths among blacks to no more than 3 per 100,000.

4.3b: Reduce drug-related deaths among Hispanics to no more than 3 per 100,000.

4.4: Reduce drug abuse-related hospital emergency department visits by at least 20 percent.

4.5*: Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.

Duplicate objective: 3.19

4.6*: Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes in the past month as follows:

Substance and age	2000 target (percent)
Alcohol:	
12–17 years	12.6
18–20 years	29.0
Marijuana:	
12–17 years	3.2
18–25 years	7.8
Cocaine:	
12–17 years	0.6
18–25 years	2.3

Use in past month	2000 target (percent)
Alcohol:	
Hispanic 12–17 years	12.0
Cocaine:	
Hispanic 12–17 years	0.6
Hispanic 18–25 years	1.0
Cigarettes:	
12–17 years	6.0

Duplicate objective: 3.20

4.7: Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28 percent of high school seniors and 32 percent of college students.

4.8: Reduce alcohol consumption by people aged 14 and older to an annual average of no more than 2 gallons of ethanol per person.

4.9*: Increase the proportion of high school seniors who perceive social disapproval of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Occasional use of marijuana	85
Trying cocaine once or twice	95
Smoking one or more packs of cigarettes per day	95

Duplicate objective: 3.21

4.10*: Increase the proportion of high school seniors who associate physical or psychological harm with the heavy use of alcohol, occasional use of marijuana, experimentation with cocaine, or regular use of tobacco, as follows:

Heavy use of alcohol	70
Regular use of marijuana	90
Trying cocaine once or twice	80
Smoking one or more packs of cigarettes per day	95
Using smokeless tobacco regularly	95

Duplicate objective: 3.22

4.11: Reduce to no more than 3 percent the proportion of male high school seniors who use anabolic steroids.

4.12: Establish and monitor in 50 States comprehensive plans to ensure access to alcohol and drug treatment programs for traditionally underserved people.

4.13: Provide to children in all school districts and private schools primary and secondary school educational programs on alcohol and other drugs, preferably as part of comprehensive school health education.

4.14: Extend adoption of alcohol and drug policies for the work environment to at least 60 percent of worksites with 50 or more employees.

4.15: Extend to 50 States administrative driver's license suspension/revocation laws or programs of equal effectiveness for people determined to have been driving under the influence of intoxicants.

4.16: Increase to 50 the number of States that have enacted and enforce policies, beyond those in existence in 1989, to reduce access to alcoholic beverages by minors.

4.17: Increase to at least 20 the number of States that have enacted statutes to restrict promotion of alcoholic beverages that are focused principally on young audiences.

4.18: Extend to 50 States legal blood alcohol concentration tolerance levels of .08 percent for motor vehicle drivers aged 21 and older and zero tolerance (.02 percent and lower) for those younger than age 21.

4.19: Increase to at least 75 percent the proportion of primary care providers who screen for alcohol and other drug use problems and provide counseling and referral as needed.

4.20: Increase to 30 the number of States with Hospitality Resource Panels (including representatives from State regulatory, public health, and highway safety agencies, law enforcement, insurance associations, alcohol retail and licensed beverage associations) to ensure a process of management and server training and define standards of responsible hospitality.

*Duplicate objective.

Priority Area 5 Family Planning

Background

Family planning provides individuals with the information and means to exercise personal choice in determining whether and when to become parents (1). Family planning entails both the prevention of unintended pregnancies and the achievement of planned, wanted pregnancies—important for improving birth outcomes, women's health, and the health of families. Family planning has had a significant impact on the health and well-being of persons in the United States through the promotion of reproductive health education and services (2).

While adolescent females receive considerable attention in family planning initiatives, all women of childbearing age require assistance with family planning. The goal of reducing unintended pregnancy is a significant public health concern in the United States. Each year, publicly subsidized contraceptive services help women avoid an estimated 1.3 million unintended pregnancies (3). Access to family planning services is an important determinant of prenatal outcomes generally, and unintended pregnancies affect healthy starts for children. Women who did not want to become pregnant are less likely to have prenatal care in the first trimester, compared with women who wanted a child at the time they became pregnant (4).

To the extent that effective family planning widens the intervals between births and ensures that pregnancies are intended, babies will be born healthier. Problems attendant to poor family planning exact serious health and social costs. Low birthweight (5), high rates of infant mortality (6), and inadequate monetary and family support (7) are some of the consequences of poor family planning. Research suggests that educating young potential parents about the financial, welfare, and social costs of pregnancy may improve decisionmaking, which, in turn, may reduce the likelihood of an unintended pregnancy (8).

Despite advances in contraceptive technology and demonstrated effectiveness of prevention initiatives, nearly one-half of all pregnancies in the United States are unintended (9). While data show a decline in the rates of unintended pregnancy (which may be attributable to higher rates of contraceptive use and improved quality of contraceptives) (10), more needs to be done to insure that all pregnancies are intended (7). Promoting the use of effective contraceptive methods and improving the effectiveness with which all methods are used could help significantly in further reducing the levels of unintended pregnancy (10, 11).

Data Summary

Highlights

Teenage pregnancy rates (**5.1**) have declined considerably in the 1990s. The teenage pregnancy rate was 98.7 per 1,000 women ages 15–19 years in 1996, down 15 percent from its high point of 116.5 in 1991. The pregnancy rate was 67.8 for women ages 15–17 years in 1996, down from its high point of 80.3 in 1990. Data for objective **5.2** show that in 1995, 49 percent of pregnancies were unintended, a decrease of 13 percent since 1988, but still short of the year 2000 target of 30 percent.

The proportions of both males and females 15 years of age who engaged in sexual intercourse during the past 3 months (**5.5**) have declined, although both were short of the year 2000 targets. The proportion of females 15–19 years using contraception at first intercourse (**5.6**) have increased between 1988 and 1995 from 65 to 76 percent. However, use of contraception during most recent intercourse decreased just as dramatically from 78 to 71 percent over the same time period for females of the same age group.

The proportion of teens that have discussed sexuality with their parents (**5.8**) increased significantly, from 66 percent in 1986 to 80 percent in 1995, although it did not meet the year 2000 target of 85 percent. It should be noted that more recent 1998 data from the National Health Interview Survey (NHIS) for adolescents 10–17 years show a loss of some of the progress made earlier, as reported from 1994 NHIS data.

Summary of Progress

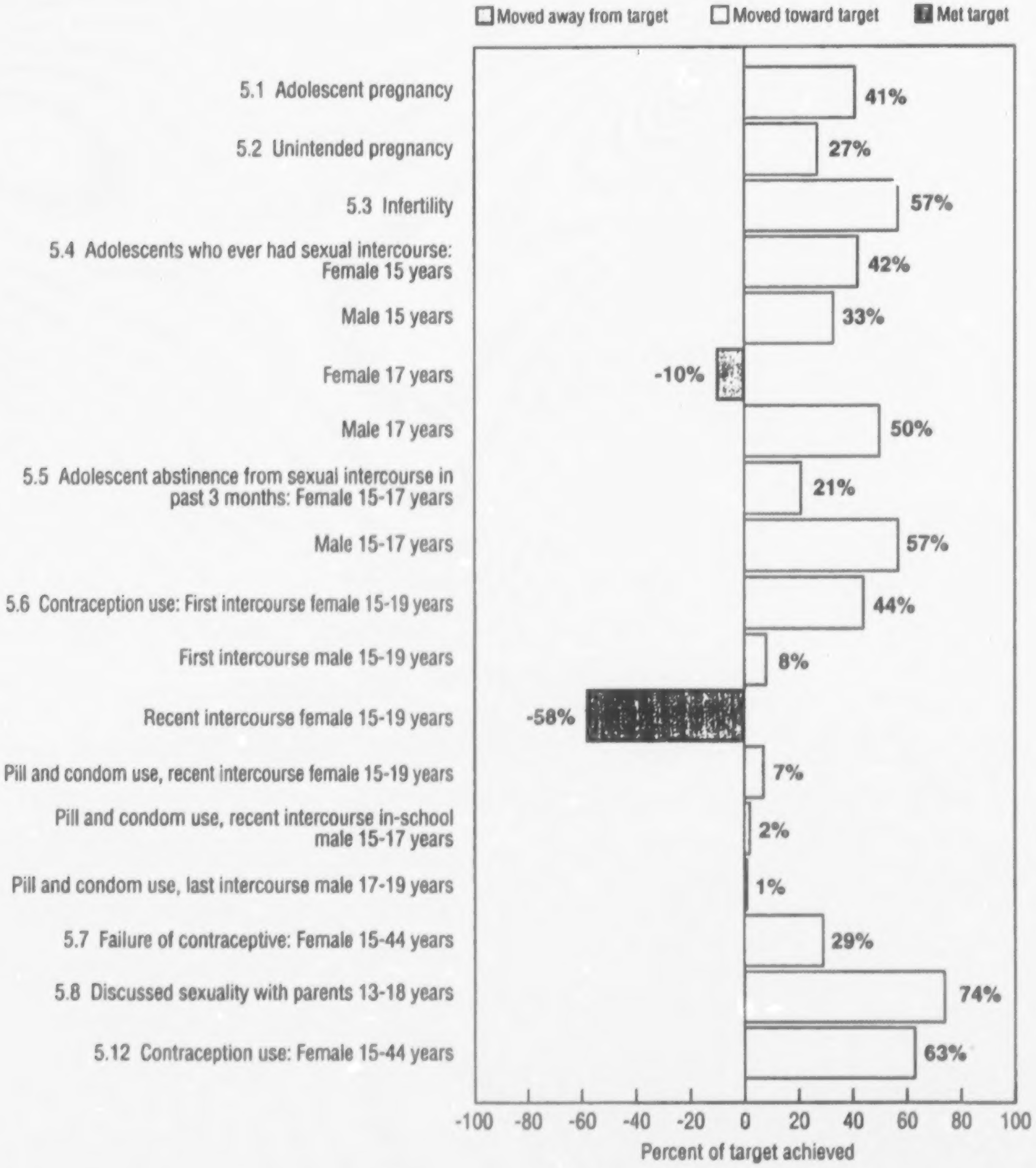
Of the 12 family planning *Healthy People 2000* objectives, progress was made in eight objectives (**5.1–5.3**, **5.5**, **5.7**, **5.8**, **5.11**, and **5.12**), although none reached their targets. Progress was mixed for three objectives (**5.4**, **5.6**, and **5.10**). Progress for objective **5.10** is based on limited updates showing only nurse practitioner data. Data were not available to update one objective (**5.9**). See table 5 for the tracking data for the objectives in this priority area and figure 5 for a quantitative assessment of progress.

Discussion

Although short of the year 2000 targets, decreases in adolescent pregnancy (**5.1**) were promising. Among the factors accounting for the overall falling teenage pregnancy rates are decreases in sexual activity, increases in condom use, and the adoption of injectable and implant contraceptives (12). Objective **5.4** sought to reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17. The progress was mixed with declines in proportions of all females, males, and black males age 15. There was a slight increase for all females age 17 and a decrease for all black females age 17. The pregnancy rates for non-Hispanic black and Hispanic teenagers were about twice as high as the rates for non-Hispanic white teenagers. The lower pregnancy rates for non-Hispanic white teenagers is due to both the lower proportion sexually active and the lower pregnancy rate among those who are sexually active. In 1995 about one out of three sexually active black and Hispanic teenagers became pregnant compared with about one out of six sexually active non-Hispanic white teenagers (12).

Substantial decreases occurred in unintended pregnancy rates (**5.2**) and, correspondingly, the use of contraceptives among females 15–44 years of age at risk for unintended pregnancy increased (**5.12**). For black females 15–44 years of age, the rate of unintended pregnancies declined from 78 percent in 1988 to 72 percent in 1995, and the use of contraceptives for this population increased from 78.9 percent in 1982 to 89.9 percent in 1995. Also, the pregnancy rate for females using a contraceptive method declined (**5.7**); this may have contributed to the decline in unintended

Figure 5. Final status of Family Planning objectives



NOTE: Complete tracking data are shown in table 5. Progress quotients are not calculated for objectives 5.9, 5.10, and 5.11. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

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pregnancies. Overall, the rate of unintended pregnancies in the United States is still higher than other developed countries. Canada's rate is 39 percent, and the Netherlands' rate is only 6 percent (10).

Early sexual intercourse among American adolescents represents a significant public health problem. Reduction of sexual activity at early ages is an important public health objective because sexual activity at early ages is associated with more partners and more frequent intercourse and the concomitant risks of sexually transmitted diseases, including HIV, and unintended pregnancy (13). Although other developed countries have similar rates of early sexual intercourse, the United States has one of the highest teenage pregnancy rates in the world (14). Abstinence from sexual intercourse by adolescents increased (**5.5**), as did their use of contraceptives (**5.6**). Adolescents are now more likely to use contraceptives, especially condoms, at first intercourse than they were at the beginning of the decade; black adolescent females are particularly likely to use injectable and implant contraceptives (15).

Transition to *Healthy People 2010*

Many of the topics covered in the *Healthy People 2000* priority area on Family Planning have been retained in *Healthy People 2010*, with an emphasis on increasing the proportion of pregnancies that are intended, as well as reducing adolescent pregnancy. In light of the serious consequences of unintended pregnancies, in 1995, the Institute of Medicine issued a comprehensive report supporting actions to establish a new national norm in which all pregnancies should be intended, that is consciously and clearly desired at the time of conception (5). The importance of developing this norm is supported in *Healthy People 2010*. In a departure from *Healthy People 2000*, which focused primarily on adolescent pregnancy, *Healthy People 2010* adopts the broader perspective that every pregnancy should be intended and highlights improvement opportunities to achieve this goal.

In addition, some new topics have been included to address key issues such as adequate spacing between pregnancies, male involvement in pregnancy prevention and reproductive health, access to emergency contraception and insurance coverage for contraception. A new objective has been added that addresses encouraging females of all ages to space their pregnancies adequately in order to lower their risk of adverse perinatal outcomes. A new developmental objective (an objective without current baseline data) has been included to increase the proportion of health care providers who provide emergency contraception. The *U.S. Guide to Clinical Preventive Services* (16) identifies postcoital administration of emergency contraceptive pills (ECP) after unprotected intercourse as an effective means of reducing subsequent pregnancy. Increased public awareness, including culturally and linguistically competent education about ECP as well as direct access to and insurance reimbursement for ECP, would contribute significantly toward attainment of this objective and reductions in the rates of unintended pregnancies.

The *Healthy People 2010* Family Planning chapter also includes a new developmental objective addressing male involvement in pregnancy prevention and family planning efforts. The next cycle of the National Survey of Family Growth (NSFG), which is expected to be conducted in 2002, is being expanded to include questions directed to males, providing an avenue for institutionalizing data collection about male fertility that will be reflected in the *Healthy People 2010* objectives.

Another developmental objective seeks to increase the proportion of health insurance policies that cover contraceptive supplies and services. In a 1995 report, the Institute of Medicine concluded that among the reasons for high rates of unintended pregnancy in the United States was lack of contraceptive coverage by private health insurance (7). Both newer managed care insurance plans and traditional fee-for-service insurance plans are more likely to pay for general gynecological services than they are to cover contraceptive services or supplies (17). A 1993 survey conducted by the Alan Guttmacher Institute found that half of indemnity plans and 7 percent of health maintenance organizations (HMOs) do not cover nonpermanent contraception. The survey also found that plans that do cover contraceptive services and/or supplies are often inconsistent in which methods they cover and have a pronounced bias toward covering permanent surgical methods (18).

The *Healthy People 2010* objective to increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active included in the Sexually Transmitted Diseases focus area was adapted from several family planning objectives in *Healthy People 2000*. This objective has been designated as a measure of one of the Leading Health Indicators (LHI). Abstinence is the only method of complete protection from unintended pregnancy and sexually transmitted diseases. Condoms, if used correctly and consistently, can help prevent both as well. The LHIs are discussed in further detail in the Introduction.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010*, summarizes the differences between the two decades of objectives, reflecting new knowledge and direction in this area.

Data Issues

Definitions

Data for objective **5.3** (infertility) is from the NSFG. Infertility is defined as the failure of a couple to conceive after 12 months of sexual intercourse without contraception.

Data Sources

Data for objective **5.1** (adolescent pregnancy) are based on three outcomes of pregnancy: live births, fetal losses, and abortions. Data on live births are collected annually through the National Vital Statistics System. For Hispanic births, it should be noted that the number of States reporting Hispanic origin data in their vital statistics has increased during the monitoring period (see Appendix). Data for estimates on fetal losses come from the NSFG, which is conducted at multiyear intervals; the most recent data available are from 1995. The 1995 data showed higher rates than reported by this source for the 1988 NSFG. Fetal loss rates are affected by the degree to which losses are detected at very early gestations; it is believed that these estimates reflect more complete reporting, rather than a "real" increase in the fetal loss rate. More information is provided in Vital and Health Statistics Report series 21 no. 56 (12).

Estimates of the number of abortions comes from the Abortion Provider Survey, conducted by the Alan Guttmacher Institute (AGI), a nongovernment organization. The estimation of the number of abortions is complex. Nationally, valid data on abortion are available from only two sources and the methods of data collection differ. The Centers for Disease Control and Prevention (CDC) collects annual information primarily through reports from State health agencies, which vary in completeness, and the AGI collects data from a direct survey of all known abortion providers, which is conducted on a periodic basis. As a result, the number of abortions reported by CDC tend to be lower than the numbers published by AGI. The data from the Abortion Provider Survey are adjusted using demographic characteristics of women obtaining abortions (in States that report abortions to CDC) to produce national estimates. More details are provided in Vital and Health Statistics series 21 no. 56 (12). The diversity of sources and the variability of reporting intervals complicate tracking of this objective.

The baseline data on inquiry about family planning for objective **5.10** (counseling by clinicians) are from the Primary Care Provider Surveys (PCPS) and refer to the proportion of providers who routinely provided counseling to 81–100 percent of their female clients of childbearing age. The sample for the study was drawn from the membership rolls of provider organizations for pediatricians, family physicians, obstetricians/gynecologists, nurse practitioners, and internists. Response rates varied from 50–80 percent across provider groups. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Baseline and the 1995 data for "all females" for objectives **5.4** (adolescent postponement of sexual intercourse), **5.5** (adolescent abstinence), and **5.6** (contraception use) are from the NSFG. Baseline and the 1995 data for "all males" for objectives **5.4**, **5.5**, and **5.6** are from the National Survey of Adolescent Males (NSAM). Additional tracking data for 1990–99 from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or targets. The YRBS surveys adolescents in schools and reports data by grade rather than age. The NSFG and the NSAM surveys include all adolescents regardless of their school enrollment status. Data from the 1992 National Health Interview Survey (NHIS) suggest that sexual intercourse is more common and condom use is less common among out-of-school youth 14–19 years of age, than among in-school youth in the same age group. However, estimates for in-school youth were very close to those for the total youth population (19).

The baseline for objective **5.8** (human sexuality discussion) came from a one-time study by the Planned Parenthood Foundation that provided data on persons 13–18 years of age who had discussed sexuality with their parents. The 1994 and 1998 data came from the NHIS, a population-based survey that provided data on persons 10–17 years of age; 1995 data came from the NSFG, which provided data on females 18–19 years old.

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Table 5. Family Planning objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	5.1	**Adolescent pregnancy**													
		Pregnancies (per 1,000)[1]													
		Female 10–14 years	1990	[5]3.5	...	3.4	3.4	3.3	3.3	3.0	2.8	- - -	- - -	- - -	...
		Female 15–17 years	1990	[5]80.3	...	79.8	77.3	76.8	75.5	71.7	67.8	- - -	- - -	- - -	50
		Live births (per 1,000)													
		Female 10–14 years	1990	[5]1.4	...	1.4	1.4	1.4	1.4	1.3	1.2	1.1	1.0	- - -	...
		Female 15–17 years	1990	[5]37.5	...	38.7	37.8	37.8	37.6	36.0	33.8	32.1	30.4	- - -	...
		Abortions (per 1,000)													
		Female 10–14 years	1990	[5]1.5	...	1.4	1.5	1.4	1.3	1.2	1.1	- - -	- - -	- - -	...
		Female 15–17 years	1990	[5]26.5	...	24.3	23.1	22.5	21.4	19.9	19.0	- - -	- - -	- - -	...
		Fetal losses (per 1,000)													
		Female 10–14 years	1990	[5]0.5	...	0.5	0.5	0.5	0.6	0.5	0.5	- - -	- - -	- - -	...
		Female 15–17 years	1990	[5]16.2	...	16.8	16.4	16.5	16.5	15.9	15.0	- - -	- - -	- - -	...
		a. Pregnancies, black adolescents (per 1,000)[1]													
		Female 15–19 years	1990	[5]215	...	215	211	205	195	178	178	- - -	- - -	- - -	120
		Female 15–17 years	1990	[5]161	...	160	156	153	146	133	128	- - -	- - -	- - -	...
		Live births (per 1,000)													
		Female 15–19 years	1990	[5]113	...	116	112	109	105	96	94	88	85	- - -	...
		Female 15–17 years	1990	[5]82	...	84	81	80	76	70	67	61	57	- - -	...
		Abortions (per 1,000)													
		Female 15–19 years[2]	1990	[5]80	...	77	76	75	70	63	66	- - -	- - -	- - -	...
		Female 15–17 years	1990	[5]55	...	53	52	51	48	44	44	- - -	- - -	- - -	...
		Fetal losses (per 1,000)													
		Female 15–19 years[2]	1990	[5]22	...	22	22	21	21	19	18	- - -	- - -	- - -	...
		Female 15–17 years	1990	[5]23	...	23	23	22	21	19	18	- - -	- - -	- - -	...
		b. Pregnancies, Hispanic adolescents (per 1,000)[1]													
		Female 15–19 years	1990	[5]156	...	165	168	166	167	163	157	- - -	- - -	- - -	105
		Live births (per 1,000)													
		Female 15–19 years[3]	1990	[5]100	...	107	107	107	108	107	102	97	94	- - -	...
		Abortions (per 1,000)													
		Female 15–19 years	1990	[5]39	...	40	43	42	42	39	37	- - -	- - -	- - -	...
		Fetal losses (per 1,000)													
		Female 15–19 years	1990	[5]17	...	18	18	18	18	18	17	- - -	- - -	- - -	...
☐	5.2	**Unintended pregnancy** (female 15–44 years)	1988	56%	- - -	- - -	- - -	- - -	- - -	49%	- - -	- - -	- - -	- - -	30%
		a. Black female (15–44 years)	1988	78%	- - -	- - -	- - -	- - -	- - -	72%	- - -	- - -	- - -	- - -	40%
		b. Hispanic female (15–44 years)	1988	55%	- - -	- - -	- - -	- - -	- - -	48%	- - -	- - -	- - -	- - -	30%
☐	5.3	**Infertility**													
		Married couples with wives 15–44 years	1988	7.9%	- - -	- - -	- - -	- - -	- - -	7.1%	- - -	- - -	- - -	- - -	6.5%
		a. Black couples with wives 15–44 years	1988	12.1%	- - -	- - -	- - -	- - -	- - -	[4]10.5%	- - -	- - -	- - -	- - -	9%
		b. Hispanic couples with wives 15–44 years	1988	12.4%	- - -	- - -	- - -	- - -	- - -	7.0%	- - -	- - -	- - -	- - -	9%

See footnotes and key at end of table.

Table 5. Family Planning objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	5.4*	**Adolescents who ever engaged in sexual intercourse**													
		Adolescents 15 years													
		All females	1988	27%	---	---	---	---	---	22%	---	---	---	---	15%
		In-school females	...	---	35%	36%	---	37%	---	38%	---	44%	---	43%	...
		All males	1988	33%	---	---	---	---	---	27%	---	---	---	---	15%
		In-school males	...	---	48%	44%	---	45%	---	42%	---	42%	---	34%	...
		a. All black males	1988	69%	---	---	---	---	---	58%	---	---	---	---	15%
		In-school non-Hispanic black males	...	---	---	79%	---	82%	---	77%	---	75%	---	68%	...
		Adolescents 17 years													
		All females	1988	50%	---	---	---	---	---	51%	---	---	---	---	40%
		In-school females	...	---	62%	66%	---	66%	---	67%	---	62%	---	40%	...
		All males	1988	66%	---	---	---	---	---	53%	---	---	---	---	40%
		In-school males	...	---	73%	68%	---	68%	---	65%	---	60%	---	44%	...
		b. All black males	1988	90%	---	---	---	---	---	79%	---	---	---	---	40%
		In-school non-Hispanic black males	...	---	---	90%	---	92%	---	88%	---	85%	---	82%	...
		c. All black females 15–17 years	1988	66%	---	---	---	---	---	[4]48%	---	---	---	---	40%
		In-school non-Hispanic black females	...	---	---	84%	---	80%	---	75%	---	73%	---	73%	...
☐	5.5*	**Adolescent abstinence from sexual intercourse for previous 3 months**													
		All sexually active females 15–17 years	1988	23.6%	---	---	---	---	---	27%	---	---	---	---	40%
		In-school sexually active females 15–17 years	...	---	24%	25%	---	25%	---	23%	---	23%	---	25%	...
		All sexually active males 15–17 years	1988	33%	---	---	---	---	---	37%	---	---	---	---	40%
		In-school sexually active males 15–17 years	...	---	30%	36%	---	33%	---	34%	---	32%	---	32%	...
☐	5.6	**Contraception use by sexually active adolescents**													
		Female													
		First intercourse (15–19 years)	1988	65%	---	---	---	---	---	76%	---	---	---	---	90%
		Recent intercourse (15–19 years)	1988	78%	---	---	---	---	---	71%	---	---	---	---	90%
		Recent intercourse (In school, 15–17 years)	...	---	78%	81%	---	83%	---	83%	---	85%	---	83%	...
		Oral contraceptive and the condom at most recent intercourse (15–19 years)	1988	2%	---	---	---	---	---	8%	---	---	---	---	90%
		Male													
		Contraception use at most recent intercourse (15–19 years)	1990	78%	...	---	---	---	---	79%	---	---	---	---	90%
		Contraception use at most recent intercourse (In school, 15–17 years)	...	---	---	83%	---	84%	---	85%	---	81%	---	86%	...
		Birth control pills and condoms at most recent intercourse (In school, 15–17 years)	1990	[8]2.0%	...	3.3%	---	2.9%	---	3.6%	---	4.8%	---	4.2%	90%
		Condom and pill use at last intercourse (17–19 years)	1988	15%	---	---	---	---	---	16%	---	---	---	---	90%
		Condom and pill use at last intercourse (In school, 17 years and over)	...	---	2%	3%	---	4%	---	7%	---	5%	---	6%	...

See footnotes and key at end of table.

Table 5. Family Planning objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	5.7	**Failure of contraceptive method for females 15–44 years**	1988	14%	---	---	---	---	---	12%	---	---	---	---	7%
		a. Black female 15–44 years	1988	18%	---	---	---	---	---	19%	---	---	---	---	8%
		b. Hispanic female 15–44 years	1988	16%	---	---	---	---	---	15%	---	---	---	---	8%
☐	5.8	**Persons ages 13–18 years who have discussed sexuality with parents**	1986	66%	---	---	---	---	[5]73%	[6]80%	---	---	---	---	85%
		Persons ages 10–17 who have discussed human sexuality with parents, church, or school	...	---	---	---	---	---	89%	[7]98%	---	---	92%	---	...
☐	5.9	**Family planning counseling**	1984	60%	---	---	---	---	---	---	---	---	---	---	90%
☐	5.10*	**Age-appropriate preconception counseling by clinicians**	...	---	---	---	---	---	---	---	---	---	---	---	60%
		Percent of clinicians routinely providing service to 81–100% of patients													
		Inquiry about family planning (female, childbearing age)													
		Pediatricians	1992	18%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Nurse practitioners	1992	53%	...	...	...	---	---	---	---	---	[8]42%	---	60%
		Obstetricians/gynecologists	1992	48%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Internists	1992	24%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Family physicians	1992	28%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Counseling about family planning													
		Pediatricians	1992	36%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Nurse practitioners	1992	53%	...	...	...	---	---	---	---	---	[8]40%	---	60%
		Obstetricians/gynecologists	1992	65%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Internists	1992	26%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
		Family physicians	1992	36%	...	...	...	---	---	---	---	---	[8,9]---	---	60%
☐	5.11*	**Clinic services for HIV and other sexually transmitted diseases**													
		Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	---	---	50%
		Title X funded family planning clinics													
		STD testing (excluding HIV)	...	---	---	---	---	---	95%	---	---	---	---	---	...
		STD counseling (excluding HIV)	...	---	---	---	---	---	98%	---	---	---	---	---	...
		STD treatment (excluding HIV)	...	---	---	---	---	---	93%	---	---	---	---	---	...
		Gonorrhea													
		Client testing[10]	...	---	97%	---	---	---	---	---	---	---	---	---	...
		Client treatment	...	---	82%	---	---	---	---	---	---	---	---	---	...
		Partner notification[11]	...	---	23%	---	---	---	---	---	---	---	---	---	...
		Partner testing	...	---	60%	---	---	---	---	---	---	---	---	---	...
		Partner treatment	...	---	62%	---	---	---	---	---	---	---	---	---	...
		Syphilis													
		Client testing[10]	...	---	86%	---	---	---	---	---	---	---	---	---	...
		Client treatment	...	---	48%	---	---	---	---	---	---	---	---	---	...
		Partner notification[11]	...	---	29%	---	---	---	---	---	---	---	---	---	...
		Partner testing	...	---	57%	---	---	---	---	---	---	---	---	---	...
		Partner treatment	...	---	40%	---	---	---	---	---	---	---	---	---	...

See footnotes and key at end of table.

Table 5. Family Planning objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	Chlamydia													
	Client testing[10]	. . .	- - -	66%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	. . .
	Client treatment	. . .	- - -	73%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	. . .
	Partner notification[11]	. . .	- - -	15%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	. . .
	Partner testing	. . .	- - -	29%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	. . .
	Partner treatment	. . .	- - -	50%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	. . .
	HIV													
	Client pretest counseling	. . .	- - -	66%	- - -	- - -	- - -	82%	- - -	- - -	- - -	- - -	- - -	. . .
	Client testing	. . .	- - -	60%	- - -	- - -	- - -	74%	- - -	- - -	- - -	- - -	- - -	. . .
☐	5.12 **Contraception use**													
	Female 15–44 years	1982	88.2%	[12]90.1%	- - -	- - -	- - -	- - -	92.5%	- - -	- - -	- - -	- - -	95%
	a. Black female 15–44 years	1982	78.9%	[12]84.7%	- - -	- - -	- - -	- - -	89.9%	- - -	- - -	- - -	- - -	95%
	b. Female 15–44 years under 100% poverty	1982	79.6%	[12]80.2%	- - -	- - -	- - -	- - -	92.1%	- - -	- - -	- - -	- - -	95%
	c. Female 15–19 years under 200% poverty	1982	67.4%	[12]74.9%	- - -	- - -	- - -	- - -	84.8%	- - -	- - -	- - -	- - -	95%

- - - Data not available.

. . . Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[#] Baseline has been revised.

[1] Pregnancy rates are calculated from the number of births, fetal losses, and abortions.

[2] Nonwhite adolescents.

[3] Excludes data from States lacking an Hispanic-origin item on their birth or death certificate.

[4] Data for non-Hispanic black females.

[5] Data represent the proportion of people 10–17 years who had discussed human sexuality with parents. Proportions for school and church were 76 percent and 32 percent, respectively.

[6] 1995 data are for females 18–19 years who have ever discussed birth control methods, how pregnancy occurs, or STDs with a parent, or have had a sex education class on birth control methods, STDs, safe sex, or abstinence.

[7] 1995 data are for females 18–19 years who have ever discussed birth control methods, how pregnancy occurs, or STDs with a parent.

[8] 1997–98 data.

[9] Response rate for this group was too low to produce reliable estimates.

[10] Includes testing at initial visit, at annual visit, or if symptomatic.

[11] By family planning clinic staff via telephone or mail.

[12] 1988 data.

NOTES: Data include revisions and, therefore, may differ from data previously published in these reports and other publications. STD is sexually transmitted disease. HIV is human immunodeficiency virus.

Objective number	*Data source*
5.1, 5.1a, b	Abortion Provider Survey, Alan Guttmacher Institute; National Vital Statistics System, CDC, NCHS; National Survey of Family Growth, CDC, NCHS.
	National Vital Statistics System, CDC, NCHS.
	National Survey of Family Growth, CDC, NCHS.
5.2, 5.2a, b	National Survey of Family Growth, CDC, NCHS.
5.3, 5.3a, b	National Survey of Family Growth, CDC, NCHS.
5.4*	Baseline and updates for all females and all black females: National Survey of Family Growth, CDC, NCHS.
	Baseline and updates for all males and all black males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.5*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS.
	Baseline and update for all males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.6	All females: National Survey of Family Growth, CDC, NCHS.
	All males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.7, 5.7a, b	National Survey of Family Growth, CDC, NCHS.
5.8	Baseline: Planned Parenthood Federation of America, Inc., 1986.
	1994 and 1998 updates: National Health Interview Survey, CDC, NCHS.
	1995 update: National Survey of Family Growth, CDC, NCHS.
5.9	Baseline: Mech EB. Unpublished. Orientation of Pregnancy Counselors toward Adoption. 1984.
5.10*	Baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
5.11*	Baseline: State Family Planning Directors.
	1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA.
	1994 data: The Urban Institute. Family Planning Clinics: Current status and recent changes in services, clients, staffing, and income sources. March 1994.
5.12, 5.12a–c	Forrest JD and Singh S. The Sexual and Reproduction Behavior of American Women, 1982–88. Family Planning Perspectives 22(5):206–14. 1990.
	1995 updates: National Survey of Family Growth, CDC, NCHS.

* Duplicate objective. See full text of objective following this table.

Family Planning Objectives

5.1: Reduce pregnancies among females aged 15–17 to no more than 50 per 1,000 adolescents.

5.1a: Reduce pregnancies among black adolescent females aged 15–19 to no more than 120 per 1,000.

5.1b: Reduce pregnancies among Hispanic adolescent females aged 15–19 to no more than 105 per 1,000.

5.2: Reduce to no more than 30 percent the proportion of all pregnancies that are unintended.

5.2a: Reduce to no more than 40 percent the proportion of all pregnancies among black females that are unintended.

5.2b: Reduce to no more than 30 percent the proportion of all pregnancies among Hispanic females that are unintended.

5.3: Reduce the prevalence of infertility to no more than 6.5 percent.

5.3a: Reduce the prevalence of infertility among black couples to no more than 9 percent.

5.3b: Reduce the prevalence of infertility among Hispanic couples to no more than 9 percent.

5.4*: Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 18.3 and 19.9

5.4a*: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 18.3a and 19.9a

5.4b*: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3b and 19.9b

5.4c*: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3c and 19.9c

5.5*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse during the previous 3 months.

Duplicate objectives: 18.15 and 19.16

5.6: Increase to at least 90 percent the proportion of sexually active, unmarried people aged 15–24 who use contraception, especially combined method contraception that both effectively prevents pregnancy and provides barrier protection against disease.

5.7: Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 7 percent in the proportion of women experiencing pregnancy despite use of a contraceptive method.

5.7a: Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of black females experiencing pregnancy in the last year despite use of a contraceptive method.

5.7b: Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of Hispanic females experiencing pregnancy in the last year despite use of a contraceptive method.

5.8: Increase to at least 85 percent the proportion of people aged 10–18 who have discussed human sexuality, including correct anatomical names, sexual abuse, and values surrounding sexuality, with their parents and/or have received information through another parentally endorsed source, such as youth, school, or religious programs.

5.9: Increase to at least 90 percent the proportion of family planning counselors who offer accurate information about all options, including prenatal care and delivery, infant care, foster care, or adoption and pregnancy termination to their patients with unintended pregnancies.

5.10*: Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 14.12

5.11*: Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 18.13 and 19.11

5.12: Increase to at least 95 percent the proportion of all females aged 15–44 at risk of unintended pregnancy who use contraception.

5.12a: Increase to at least 95 percent the proportion of black females aged 15–44 at risk of unintended pregnancy who use contraception.

5.12b: Increase to at least 95 percent the proportion of females aged 15–44 with income less than 100 percent of poverty at risk of unintended pregnancy who use contraception.

5.12c: Increase to at least 95 percent the proportion of females aged 15–19 years under 200 percent of poverty at risk of unintended pregnancy who use contraception.

*Duplicate objective.

Priority Area 6 Mental Health and Mental Disorders

Background

Major mental disorders continue to affect large numbers of persons in the United States. Suicide is one of the most serious consequences of these disorders, but other physical, emotional, social, and economic costs occur as well—not only for individuals but also for families, communities, and government. The most common disorders include forms of anxiety, panic, agoraphobia, social phobia, simple phobia, post-traumatic stress and generalized anxiety, mood disorders, major depressive episodes, and manic episodes or dysthymia. Other major conditions that significantly affect quality of life include schizophrenia and other nonaffective psychoses, conduct disorders, and antisocial personality disorders.

In 1992, nearly 40 million persons in the United States between the ages of 15 and 54 years experienced a major mental disorder, approximately 24 percent of the population, slightly more than the number experiencing cardiovascular disorders. The lifetime estimate of the prevalence of mental illness is even higher (49 percent) (1,2). Individuals affected by major mental disorders are at unusually high risk for suicide, as well as for social disabilities, risk-laden life trajectories, and the development of other disorders, mental and physical. The costs precipitated by these major disorders in the United States approximated $150 billion in 1996. Treatment costs accounted for $69 billion, including approximately $37 billion from public funds; lost productivity or premature death accounted for another $75 billion; and criminal justice involvement with the mentally ill and property destruction cost some $6 billion (3).

In 1990, more than 5 million people were admitted to mental health facilities for treatment; about 62 percent were treated on an outpatient basis in hospitals, mental health clinics, and other facilities, with self-help and human service organizations providing most supplementary and alternative care (4). Public insurance pays for treatment of roughly 48 percent of those admitted for inpatient treatment and 35 percent of those admitted as outpatients (5). Despite the volume of persons who received treatment, only 40 percent of those who experience mental illness receive treatment (6), and only one-quarter of these receive care from the mental health sector (1).

Among people with early onset disorders, the probability of no lifetime treatment contact or delay in contact is unusually high. This is particularly likely for those with childhood-onset mood or anxiety disorders, which are also more severe and disabling than later onset disorders. However, the majority of persons who experience other major disorders eventually do seek treatment. On average, this takes place between 6 and 14 years later, depending on the disorder. Comorbidity appears to be part of this treatment-seeking process, increasing the likelihood of both 12-month (34 percent) and lifetime (42 percent) treatment contact (1). Altogether, when severity and persistence of the disorder or level of associated role impairment is taken into account (among persons 18–54 years of age), the likelihood of comorbid substance use, service use, frequent service use, and service use in the mental health specialty sector and in self-help groups increases markedly.

Given these facts, avoiding disabling outcomes of the major mental disorders, intervening early in their course, and preventing their onset all become important strategies for improving the health of the Nation. Advances in research, such as those reviewed in a recent Institute of Medicine report (7), have provided additional impetus for this complex undertaking. Numerous conditions, biologic and genetic vulnerabilities, acute or chronic physical dysfunction, insecure attachment styles, personality characteristics, and a range of environments, have been found to affect both mental disorders and mental health. Addressing this array of contingencies through preventive interventions requires a mix of minimizing risk factors and maximizing protective factors in a combination of preventive and treatment interventions.

Data Summary

Highlights

By the end of the decade, progress in achieving objectives was most remarkable for those concerned with enhancing protective factors and those concerned with reducing mortality/physical morbidity linked to disorder.

The enhancements involved both system development and individual action. Mutual help clearinghouses became available to all 50 States (**6.12**). The number of adults seeking help with their emotional and personal problems (**6.8**) increased as anticipated and moved toward the target for those with disabilities (**6.8a**). The use of community support among people with severe mental disorders (**6.6**) also increased past the targeted 30 percent.

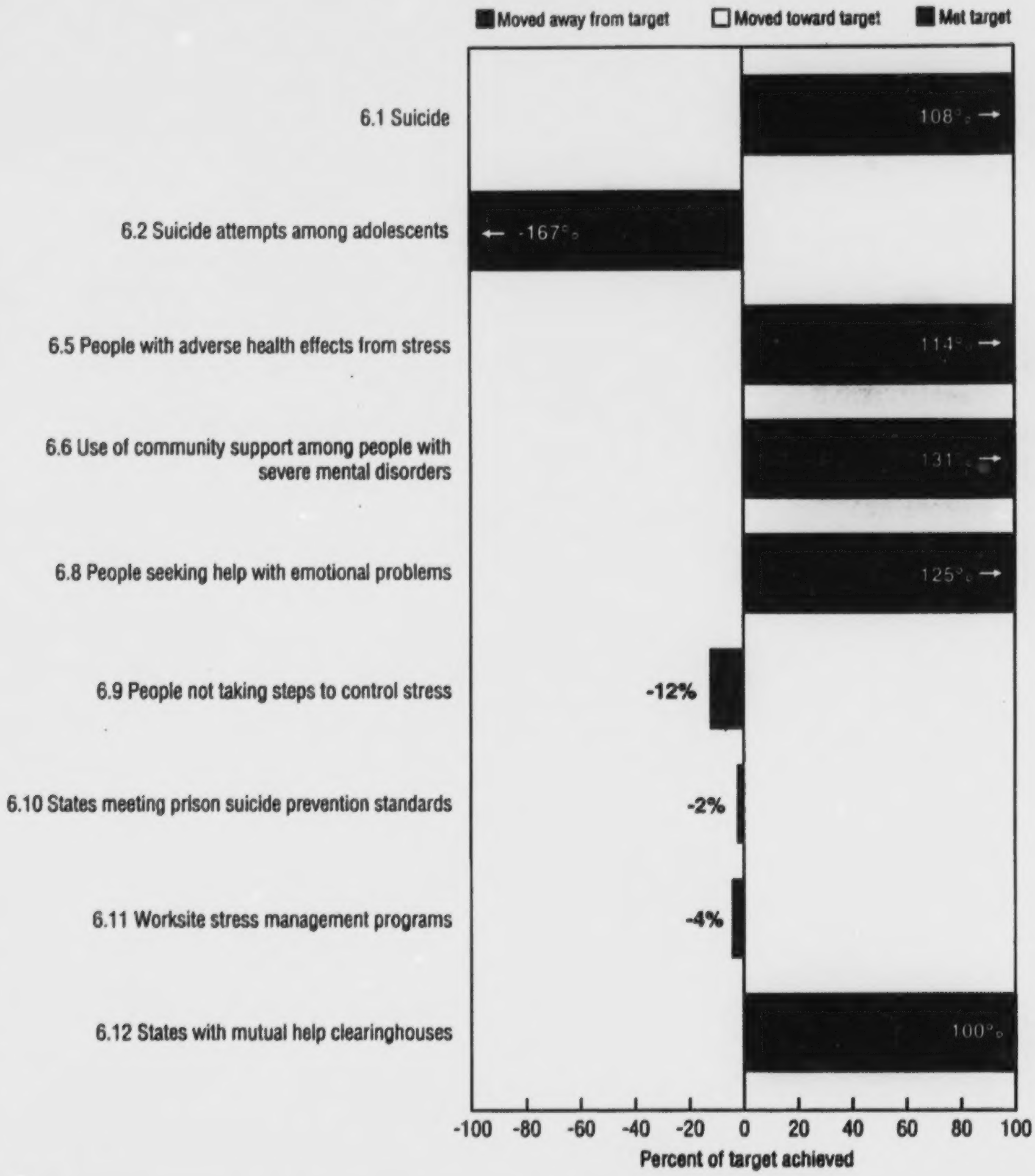
The reductions in mortality and morbidity linked to disorder involved both suicide and physical illness. Suicide rates overall, and in particular among males ages 65 years and over, and among adolescents 15–19 years of age, declined below the target (**6.1**, **6.1c**, and **6.1a**); suicide rates among males 20–34 years of age moved toward the target (**6.1b**). Adverse health effects from stress declined as anticipated among adults in general (**6.5**) and moved toward the target for those with disabilities (**6.5a**).

On the other hand, significant reversals were seen specific to objectives involving interventions in high-risk environments and suicidality among adolescents. Objectives regarding the number of States meeting nationally recognized prison suicide prevention standards (**6.8**) and adults not taking steps to control stress (**6.9**) lost ground. Objectives concerning suicide attempts among adolescents (14–17 years of age) and among female adolescents (**6.2**, **6.2a**) also lost ground.

Summary of Progress

Year 2000 targets were met for five objectives (**6.1**, **6.5**, **6.6**, **6.8**, and **6.12**). One objective moved toward its target (**6.4**), although progress was based on estimated data from the prior decade. Seven objectives moved away from their targets (**6.2**, **6.7**, **6.9**, **6.10**, **6.11**, **6.14**, and **6.15**).Two of these objectives (**6.7** and **6.15**) had very slight changes and have not been updated since a 1990–92

Figure 6. Final status of Mental Health and Mental Disorders objectives



NOTE: Complete tracking data are shown in table 6. Progress quotients are not calculated for objectives 6.3, 6.4, 6.7, 6.13, 6.14, and 6.15. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

estimate. Another two objectives (**6.10** and **6.11**) that appeared to move away from targets did show progress based on supplemental data. Objective (**6.13**) showed mixed results. Progress for 6.13 and **6.14** was based on data limited to nurse practitioners only. No national data were available for one objective (**6.3**). Details regarding measurement issues are available in the following section on data issues. See table 6 for the tracking data for the objectives in this priority area and figure 6 for a quantitative assessment of progress.

Discussion

The 1990s saw a tremendous increase in awareness of mental health issues with the recognition that mental health in part reflects a healthy community. This is reflected in several of the objectives that obtained the targets set for the year 2000; a rise in people seeking help with emotional problems (**6.8**), a rise in the use of community support among people with severe mental disorders (**6.6**), a decline in people with adverse health effects from stress (**6.5**), a decline in suicide (**6.1**), and all States being covered by mutual help clearinghouses (**6.12**).

In 1999, the end of the "Decade of the Brain" saw the first Surgeon General's Report on Mental Health (3), which called attention to the body of research testing effective treatments and service delivery models and their implications for advancing the state of mental health in the Nation. Factors influencing trends in mental health include: increased third-party financing and the provision of services through managed care, an international recognition of the "burden of disease" that documents depression as the leading cause of disability worldwide among persons 5 years of age and older, and a rising concern with the translation of resilience research into services research and practice.

Other national events that have provided guidance for mental health concerns at the end of the decade (1999) include:

- The White House Conference on Mental Health
- National antistigma campaign
- The Surgeon General's Call to Action on Suicide Prevention
- The Surgeon General's conference on Children's Mental Health
- Inclusion of the treatment of recognized depression as a National Leading Health Indicator for the decade 2000–2010

Transition to *Healthy People 2010*

Data development, increasing access to services, eliminating disparities, and providing for mental health needs across the life span continue as themes into the new decade for *Healthy People 2010*. There are 14 objectives included in the Mental Health and Mental Disorders chapter for *Healthy People 2010*, presented in terms of mental health status improvement, treatment expansion, and State activities. Only two objectives are taken directly from *Healthy People 2000*, suicide (**6.1**) and suicide attempts among adolescents (**6.2**) (with suicide age-adjusted to the 2000 population). Treatment of depression among adults (**6.7**) appears in *Healthy People 2010* as well as *Healthy People 2000*, although the objective has been expanded to monitor other serious mental illnesses such as anxiety disorders and schizophrenia as well. The objective to track the percent of worksites that have stress management programs (**6.11**) has also been included in *Healthy People 2010*; it has been relocated in the Occupational Health and Safety chapter.

The *Healthy People 2010* objective for adults with recognized depression who receive treatment, which was retained from *Healthy People 2000* (with a different data source and age group), has been designated as a measure of one of the Leading Health Indicators (LHI). The LHIs are discussed in further detail in the Introduction.

Four new objectives were added to *Healthy People 2010*, they include: reduce the proportion of homeless adults who have serious mental illness, increase the proportion of persons with serious mental illness who are employed, increase the number of States that track satisfaction with the mental health services received, and increase the number of States with an operational mental health plan that addresses mental health crisis interventions, ongoing screening, and treatment services for the elderly.

In addition, seven new developmental objectives (objectives without current baseline data) appear for mental health in *Healthy People 2010*. They include: reduce the relapse rates for persons with eating disorders, increase the number of persons seen in primary health care who receive mental health screening and assessment, increase the proportion of children with mental health problems who receive treatment, increase the proportion of juvenile justice facilities that screen new admissions for mental health problems, increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders, increase the proportion of local governments with community-based jail diversion programs for adults with serious mental illness, and increase the number of States with an operational mental health plan that addresses cultural competence. Baseline data are expected to be developed for these objectives by 2004.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 6 have been published in the National Center for Health Statistics' *Healthy People Statistical Notes* series (8). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. Where appropriate, the text of the questionnaire items used to measure the objectives is also provided. See Appendix table VII for further information.

Objective **6.1** (suicide) is monitored using data from the National Vital Statistics System (NVSS). The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (9).

Objective **6.2** (adolescent suicide attempts) is monitored with data from the Youth Risk Behavior Survey (YRBS), a school-based survey. Suicide attempts are self-reported and are limited to those that required medical attention in the last 12 months. The exclusion of adolescents not in school from the data used to monitor objective **6.2** may underestimate the actual number of suicide attempts (10). Data from the 1992 National Health Interview Survey (NHIS) youth supplement suggest that other types of violent behavior (weapons-carrying and fighting) are higher among youth (14–19 years of age) not in school than among those in school; the estimates for fighting and weapons-carrying for in-school youth were very close to estimates for the total population. (The NHIS youth supplement did not include questions on suicide attempts.) Reliance on self-report of suicide attempts that resulted in hospitalization, without validation from medical sources, may also affect the accuracy of estimates. However, a recent study by the Centers for Disease Control and Prevention (CDC) indicates that estimates among in-school youth are highly reliable (11).

The wording and baseline data for objective **6.10** (suicide prevention in jails) were established using States as the organizational level for monitoring and implementing suicide prevention protocols in jails. However, jails are usually under the jurisdiction of counties or municipalities. State-level data on jails are limited; the alternative data track the objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, are only available for 1993 but later updates are expected. Additional data are from the American Correctional Association's (ACA) list of jails, which are ACA accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

Data Sources

Data for objective **6.9** (people not taking steps to control stress) are from the *Prevention Index*, Rodale Press. Data are collected from a random sample telephone survey weighted to census data for sex, race, education, and region of the country.

Baseline data for objectives **6.13** (clinical review of childhood mental functions) and **6.14** (clinical review of adult mental functions) are from the Primary Care Providers Surveys (PCPS). The samples for the surveys were drawn from the membership rolls of provider organizations for family physicians, nurse practitioners, internists, obstetricians/gynecologists, and pediatricians (**6.14**). Response rates ranged from 50 to 80 percent. The data on assessment and screening represent the proportion of providers who routinely queried 81–100 percent of their patients about a particular type of mental function. Data on treatment and referral refer to the proportion of providers who provided or referred patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners. These updates are based on a partial characterization of medical screening activity and may not fully represent the primary care provider community.

Data Comparability

Baselines for objectives **6.4** (adult mental disorders), **6.7** (treatment for depression), and **6.15** (prevalence of depression) came from the National Institute for Mental Health (NIMH) Epidemiologic Catchment Area (ECA) studies conducted in five metropolitan areas during the early 1980s. This household survey used the Diagnostic Interview Schedule (DIS) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) criteria to estimate 1-month prevalences, which were used to set the baseline and target. The updates for these objectives come from the National Comorbidity Survey (NCS), which is a national survey that collects prevalence data using the Composite International Diagnostic Interview (CIDI) and DSM-IIIR and IV criteria. Planned monitoring of the objectives originally involved reanalysis of ECA data to produce 1-year prevalence estimates and recoding of NCS data to reflect DSM-III categories.

Subsequent conduct of an NCS-replication in the year 2000 will provide comparative data more appropriate to the decade, the currently used diagnostic scheme, and generalization to the national population. These prevalence and treatment findings will be available in 2001.

Data for objective **6.11** (worksite stress management programs) are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Some of the businesses surveyed had multiple worksites with different health promotion activities. Additionally, both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities.

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11. Brener N, et al. Reliability of the Youth Risk Behavior Survey questionnaire. Paper presented at the annual meeting of the American Public Health Association, Oct 1994.

Table 6. Mental Health and Mental Disorders objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	6.1* **Suicide** (age adjusted per 100,000)	1987	11.7	11.5	11.4	11.1	11.3	11.2	11.2	10.8	10.6	10.4	---	10.5
	a. Adolescents 15–19 years (per 100,000)	1987	10.2	11.1	11.0	10.8	10.9	11.1	10.5	9.7	9.5	8.9	---	8.2
	b. Male 20–34 years (per 100,000)	1987	25.2	25.1	25.1	24.5	25.5	26.5	26.3	24.2	23.4	22.9	---	21.4
	c. White male 65 years and over (per 100,000)	1987	46.7	44.4	42.7	41.0	40.9	38.9	38.7	37.8	36.1	38.2	---	39.2
	d. American Indian/Alaska Native male (age adjusted per 100,000)	1987	20.1	21.0	19.2	17.9	18.7	23.8	20.1	20.0	21.3	21.4	---	17.0
▨	6.2* **Suicide attempts among adolescents 14–17 years**	1990	2.1%	...	1.7%	---	2.7%	---	2.8%	---	2.6%	---	2.6%	1.8%
	a. Female 14–17 years	1991	2.5%	...	...	---	3.8%	---	3.4%	---	3.3%	---	3.1%	2.0%
□	6.3 **Mental disorders**													
	Children and adolescents 18 years and under	1988	20%	---	---	---	---	---	---	---	---	---	---	17%
□	6.4 **Mental disorders among adults 18–54 years** (1-month prevalence)	1981–85	12.6%	---	---	---	---	---	---	---	---	---	---	10.7%
	Mental disorders among adults 18–54 years (1-year prevalence)	...	---	[1]20.4%	---	[2]16.0%	---	---	---	---	---	---	---	...
■	6.5 **Adverse health effects from stress for people 18 years and over**	1985	44.2%	40.6%	---	---	39.2%	---	33.9%	---	---	33.7%	---	35%
	a. People 18 years and over with disabilities	1985	53.5%	54.2%	---	---	54.9%	---	49.1%	---	---	---	---	40%
■	6.6 **Use of community support among people 18 years and over with severe mental disorders**	1986	15%	---	---	---	---	[3]34.6%	---	---	---	---	---	30%
▨	6.7 **Treatment for depression among people 18–54 years** (6-month services)	1981–85	31%	---	---	---	---	---	---	---	---	---	---	54%
	Treatment for depression among people 18–54 years (1-year services)	...	---	[1]34.7%	---	[2]34.2%	---	---	---	---	---	---	---	...
■	6.8 **People 18 years and over seeking help with emotional/personal problems**	1985	11.1%	12.5%	---	---	14.3%	---	[4]18.9%	---	---	22.2%	---	20%
	a. People 18 years and over with disabilities	1985	14.7%	17.0%	---	---	19.8%	---	[4]26.6%	---	---	---	---	30%
▨	6.9 **People 18 years and over not taking steps to control stress**	1985	[5]31%	---	33%	---	36%	34%	34%	---	---	---	---	5%
▨	6.10* **Suicide prevention in jails**													
	Number of States meeting nationally recognized suicide prevention standards	1992	[5]2	...	...	...	---	---	2	1	---	---	---	50
	Proportion of jails with suicide policies	...	---	---	---	---	79.5%	---	---	---	---	---	---	...
	Proportion of jails with ACA accreditation	...	---	1%	1%	1%	2%	2%	2%	---	---	---	3%	...
▨	6.11 **Worksite stress management programs**	1985	26.6%	---	---	37.0%	---	---	---	---	---	---	[5]26.0%	40%
■	6.12 **Mutual self-help network**													
	Number of States with mutual help clearinghouses	1995	8	...	...	...	...	...	...	---	---	---	---	50
	Number of Federal clearinghouses	1995	[6]2	...	...	...	...	...	...	---	---	---	---	...
□	6.13 **Clinician review of patients' mental functioning**	...	---	---	---	---	---	---	---	---	---	---	---	60%
	Percent of clinicians routinely providing service to 81–100% of patients													
	Inquiry about cognitive functioning													
	Nurse practitioners	1992	35%	...	...	...	---	---	---	---	---	[7]19%	---	60%
	Obstetricians/gynecologists	1992	9%	...	...	...	---	---	---	---	---	[7,8]...	---	60%

See footnotes and key at end of table.

Table 6. Mental Health and Mental Disorders objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Internists	1992	18%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Family physicians	1992	7%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Inquiry about emotional/behavioral functioning													
	Nurse practitioners	1992	40%	...	...	...	---	---	---	---	---	[7]26%	---	60%
	Obstetricians/gynecologists	1992	12%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Internists	1992	25%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Family physicians	1992	13%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Treatment/referral for cognitive problems													
	Nurse practitioners	1992	20%	...	...	...	---	---	---	---	---	[7]24%	---	60%
	Obstetricians/gynecologists	1992	20%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Internists	1992	27%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Family physicians	1992	21%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Treatment/referral for emotional/behavioral problems													
	Nurse practitioners	1992	23%	...	...	...	---	---	---	---	---	[7]33%	---	60%
	Obstetricians/gynecologists	1992	23%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Internists	1992	35%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
	Family physicians	1992	27%	...	...	...	---	---	---	---	---	[7,8]---	---	60%
■	**6.14 Clinician review of children's mental functioning**	...	---	---	---	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients													
	Inquiry about cognitive functioning													
	Pediatricians	1992	62%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Inquiry about emotional/behavioral functioning													
	Pediatricians	1992	47%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Treatment/referral for cognitive problems													
	Pediatricians	1992	51%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Treatment/referral for emotional/behavioral problems													
	Pediatricians	1992	45%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Inquiry about parent-child relationship													
	Pediatricians	1992	55%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Nurse practitioners	1992	55%	...	...	...	---	---	---	---	---	[7]51%	---	75%
	Family physicians	1992	30%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Treatment/referral for parent-child interaction problems													
	Pediatricians	1992	34%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Nurse practitioners	1992	24%	...	...	...	---	---	---	---	---	[7,8]---	---	75%
	Family physicians	1992	29%	...	...	...	---	---	---	---	---	[7,8]---	---	75%

See footnotes and key at end of table.

Table 6. Mental Health and Mental Disorders objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	**6.15 Prevalence of depression in people 18–54 years** (1-month prevalence)	1981–85	5.1%	---	---	---	---	---	---	---	---	---	---	4.3%
	Prevalence of depression in people 18–54 years (1-year prevalence)	...	---	[1]10.9%	---	[2]11.1%	---	---	---	---	---	---	---	...
	a. Female 18–54 years (1-month prevalence)	1981–85	6.6%	---	---	---	---	---	---	---	---	---	---	5.5%
	Female 18–54 years (1-year prevalence)	...	---	[1]14.2%	---	[2]13.1%	---	---	---	---	---	---	---	...

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[B] Baseline has been revised.

[1] 1981–85 data. Data are for noninstitutionalized, nonrural, white, black, or Hispanic people 18–54 years.

[2] 1990–92 data. Data are for noninstitutionalized, nonrural, white, black, or Hispanic people 18–54 years.

[3] Estimate represents the proportion of people with mental disorders (excluding substance disorders only) in the past year which interfered with their ability to work or find work and who sought help from community mental health services.

[4] Estimate represents the proportion of people who sought help from a family member, therapist, or minister/rabbi. Individual values were: family members, 15.6 percent (21.0 percent for people with disabilities), therapist, 6.8 percent (11.8 percent for people with disabilities), and minister/rabbi, 4.4 percent (6.9 percent for people with disabilities).

[5] 1998–99 data. Only 26 percent of worksites had onsite stress management programs, but 48 percent offered stress management either onsite or through the health plan.

[6] Clearinghouses provide coverage for all 50 states, establishing the required network.

[7] 1997–98 data.

[8] Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	Data source
6.1*, 6.1a–d	National Vital Statistics System, CDC, NCHS.
6.2, 6.2a*	Youth Risk Behavior Survey, CDC, NCCDPHP.
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6.4	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. 1990 and 1992 data: National Comorbidity Survey, University of Michigan.
6.5, 6.5a	National Health Interview Survey, CDC, NCHS.
6.6	Baseline: National Institute of Mental Health Community Support Program Client Follow-up Study, SAMHSA. 1994 data: National Health Interview Survey, CDC, NCHS.
6.7	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. Updates: National Comorbidity Survey, University of Michigan.
6.8, 6.8a	National Health Interview Survey, CDC, NCHS.
6.9	Prevention Index, Rodale Press, Inc.
6.10*	Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives. Baseline (suicide policies): National Census of Jails, DOJ, BJS. Baseline and update (ACA accreditation): American Correctional Association.
6.11	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP; 1998–99 update: National Worksite Health Promotion Survey, OPHS, ODPHP.
6.12	SAMHSA.
6.13	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
6.14	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
6.15	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. 1990 and 1992 data: National Comorbidity Survey, University of Michigan.

* Duplicate objective. See full text of objective following this table.

Mental Health and Mental Disorders Objectives

6.1*: Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 7.2

6.1a*: Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 7.2a

6.1b*: Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 7.2b

6.1c*: Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 7.2c

6.1d*: Reduce suicides among American Indian and Alaska Native men to no more than 17.0 per 100,000.

Duplicate objective: 7.2d

6.2*: Reduce to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 7.8

6.2a*: Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 7.8a

6.3: Reduce to less than 17 percent the prevalence of mental disorders among children and adolescents.

6.4: Reduce the prevalence of mental disorders (exclusive of substance abuse) among adults living in the community to less than 10.7 percent.

6.5: Reduce to less than 35 percent the proportion of people aged 18 and older who report adverse health effects from stress within the past year.

6.5a: Reduce to less than 40 percent the proportion of people with disabilities who report adverse health effects from stress within the past year.

6.6: Increase to at least 30 percent the proportion of people aged 18 and older with severe, persistent mental disorders who use community support programs.

6.7: Increase to at least 54 percent the proportion of people with major depressive disorders who obtain treatment.

6.8: Increase to at least 20 percent the proportion of people aged 18 and older who seek help in coping with personal and emotional problems.

6.8a: Increase to at least 30 percent the proportion of people with disabilities who seek help in coping with personal and emotional problems.

6.9: Decrease to no more than 5 percent the proportion of people aged 18 and older who report experiencing significant levels of stress who do not take steps to reduce or control their stress.

6.10*: Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 7.18

6.11: Increase to at least 40 percent the proportion of worksites employing 50 or more people that provide programs to reduce employee stress.

6.12: Establish a network to facilitate access to mutual self-help activities, resources, and information by people and their family members who are experiencing emotional distress resulting from mental or physical illness.

6.13: Increase to at least 60 percent the proportion of primary care providers who routinely review with patients their patients' cognitive, emotional, and behavioral functioning and the resources available to deal with any problems that are identified.

6.14: Increase to at least 75 percent the proportion of providers of primary care for children who include assessment of cognitive, emotional, and parent-child functioning with appropriate counseling, referral, and followup, in their clinical practices.

6.15: Reduce the prevalence of depressive (affective) disorders among adults living in the community to less than 4.3 percent.

6.15a: Reduce the prevalence of depressive (affective) disorders among women living in the community to less than 5.5 percent.

*Duplicate objective.

Priority Area 7 Violent and Abusive Behavior

Background

Injuries and deaths due to violence and abusive behavior continue to be pervasive in the United States and cost the Nation over $200 billion annually. Violence claims the lives of many of the Nation's youth and threatens the health and well-being of persons of all ages. Each year approximately 50,000 persons in the United States die from violence-related injuries. On an average day, 53 persons die from homicide, and a minimum of 18,000 persons survive interpersonal assaults, 84 persons complete suicide, and as many as 3,000 persons attempt suicide (1).

The United States has the highest rates of lethal childhood violence when compared to other industrialized countries (2). In 1997, nearly 19,000 children 19 years of age and under died of injuries, one-third from violence and two-thirds from unintentional injury (3). Of all homicide victims in 1997, 37 percent were 24 years of age and under (4). Homicide remains the second leading cause of death for young persons 15–24 years of age and the leading cause of death for African Americans in this age group (5).

Data from 1979 through 1993 indicate that the total homicide rate increased due to increases in firearm-related homicides (6,7). Furthermore, for each of the 32,436 persons killed by a gunshot wound in the United States in 1997, approximately 2 more people were treated for nonfatal wounds in hospital emergency departments (8).

Suicide is the eighth leading cause of death in the United States. In 1997 suicide was the third leading cause of death for children 10–14 years of age and young persons 15–24 years of age (5). The economic costs of suicide among young persons 15–24 years of age has been estimated at over $2.26 billion per year and, when attempted suicide is considered, this cost increases to over $3.19 billion (9).

Unfortunately, youth continue to be involved as both perpetrators and victims of violence. In 1998, 5,506 young people 15–24 years of age were victims of homicide, an average of 15 youth homicide victims per day. Homicide is second only to motor vehicle crashes as a cause of injury deaths for persons 15–24 years of age (10). For each death there are at least 100 nonfatal violence-related injuries. For adolescents 12 years of age and older, physical assault victimization occurred twice as often as in the general population. Additionally, according to a report by the U.S. Department of Justice, assaults were significantly higher among males. The report also states that the number of assaults were higher for those with lower household incomes (less than $7,500) when compared to the rates of assault victimization of households with greater annual incomes (more than $35,000) (11).

Intimate partner violence and sexual assault threaten people of all walks of life. Even though both females and males experience these types of violence, male victimization of females is more common in intimate partner violence and sexual assault. Although most assault victims survive, they suffer physically and emotionally. In 1995, almost 5,000 females in the United States were murdered. In those cases for which the Federal Bureau of Investigation had data on the relationship between the offender and the victim, 85 percent were killed by someone they knew. In 1994, more than 500,000 females were seen in hospital emergency departments for violence-related injuries, and 37 percent of those females were there for injuries inflicted by spouses, ex-spouses, or nonmarital partners (12).

Child maltreatment continues to be a major concern. In 1997, an estimated 1,196 fatalities were due to child maltreatment in the 50 States and the District of Columbia. In the same year, the rate of child victims was 13.9 per 1,000 children in the general population. Based on information from 39 States, 75.4 percent of the perpetrators were the victim's parents, 10.2 percent were relatives, and 1.9 percent were individuals in other caretaking relationships (13).

Data Summary

Highlights

While violent and abusive behaviors continue to be major causes of death, injury, and stress in the United States, during the last decade there were many indications of progress. All three violent mortality objectives met their year 2000 targets. The age-adjusted homicide rate for the total population (**7.1**) decreased to 7.1 per 100,000 persons in 1998, surpassing the year 2000 target of 7.2 per 100,000. Additionally, homicide rates decreased for young adult black and Hispanic males and all American Indian/Alaska Natives, and to below the year 2000 target for black females. Suicide rates (**7.2**) in the total population (age adjusted) fell to 10.4 per 100,000 in 1998, below the year 2000 target of 10.5. Suicide rates also declined for adolescents 15–19 years of age, males 20–34 years of age, and white males 65 years of age and over. On the other hand, suicide rates for American Indian/Alaska Native males increased from 20.1 per 100,000 persons in 1987 to 21.4 per 100,000 in 1998. Firearm-related deaths (**7.3**) declined for the total population (age adjusted). The rate in 1998 was 11.3 per 100,000 persons, which was below the year 2000 target of 11.6.

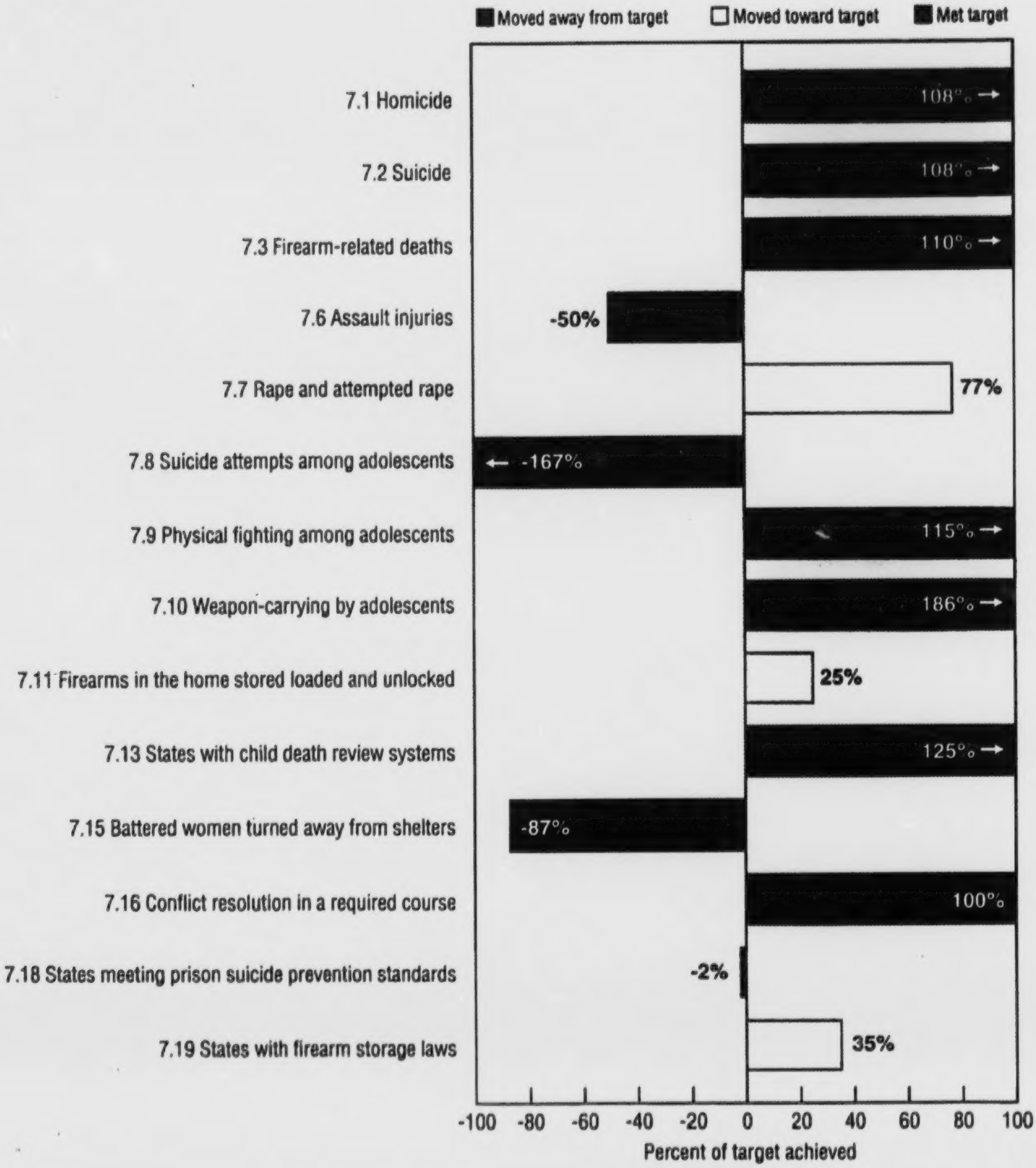
The incidence of rape and attempted rape for females 12 years of age and over (**7.7**) declined substantially, from 332 per 100,000 in 1992 to 160 in 1998, even though it fell short of its year 2000 target of 108.

There was progress for two objectives related to adolescent behaviors, physical fighting (**7.9**) and weapon-carrying (**7.10**) among adolescents 14–17 years of age. The incidence of physical fighting and weapon-carrying among youth is measured by the number of incidents per 100 students per month. The number of incidents of physical fighting decreased from 137 in 1991 to 106 in 1999, surpassing the year 2000 target of 110. The incidence of weapon-carrying decreased from 107 incidents in 1991 to 68 in 1999, which surpassed the year 2000 target of 86.

Another objective that surpassed the year 2000 target was the implementation in States of child death review systems for unexplained child deaths (**7.13**). The number of States (including the District of Columbia) increased from 33 in 1991 to 48 in 1996, above the year 2000 target of 45.

Two objectives moved dramatically away from the year 2000 targets. The objectives were (**7.6**) reduce assault injuries among people 12 years of age

Figure 7. Final status of Violent and Abusive Behavior objectives



NOTE: Complete tracking data are shown in table 7. Progress quotients are not calculated for objectives 7.4, 7.5, 7.12, 7.14, and 7.17. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

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and older and (**7.8**) reduce injurious suicide attempts by adolescents. Disturbingly, injurious suicide attempts among adolescents 14–17 years of age increased from 2.1 percent in 1990 to 2.6 percent in 1997.

Summary of Progress

The priority area of Violent and Abusive Behavior contained a total of 19 objectives. Seven objectives, (**7.1**, **7.2**, **7.3**, **7.9**, **7.10**, **7.13**, and **7.16**) met their respective year 2000 targets. Four (**7.5**, **7.7**, **7.11**, and **7.19**) progressed toward the year 2000 targets. Five objectives (**7.4**, **7.6**, **7.8**, **7.15**, and **7.18**) moved away from the year 2000 target, although three of these (**7.4**, **7.15**, and **7.18**) had definitional issues making monitoring difficult (see Data Issues). Three objectives (**7.12**, **7.14**, and **7.17**) remained without baselines. See table 7 for the tracking data for the objectives in this priority area and figure 7 for a quantitative assessment of progress.

Discussion

As the 21st century begins, the public, private, and government sectors must work together to prevent violence. Studies have demonstrated interrelationships between risk factors for different types of violence but much more research is needed. Intervention evaluations have demonstrated a limited number of effective programs for violence prevention. Further, some interventions appear to be effective but their ability to reduce morbidity and mortality needs to be evaluated (14). Given the diversity of communities and circumstances, many more types of prevention programs and interventions need to be developed and evaluated.

The reasons for decline in many of the measures of violence-related objectives during the last decade are not well understood. The decline demonstrated in the latter part of the decade may be due to multiple risk and protective factors. Factors that may have influenced the decline are changes in prevention activities, demographics, the economy, and the prevalence of substance abuse.

Measurement of progress within the area of family and intimate violence prevention had three objectives (**7.5**, **7.6**, and **7.7**) for which measurements were affected by the redesign of the National Crime Victimization Survey in 1992. The revised questions elicited higher rates for rape and other sex offenses, as well as crimes committed by relatives and acquaintances. The sensitive nature of this issue makes it difficult to study. Therefore, knowledge is limited about the factors that affect the likelihood that males will behave violently toward females, the factors that endanger or protect females from violence, and the physical and emotional consequences of such violence for families and their children.

In the area of child maltreatment, data systems are needed to identify new cases and to characterize associated causes of maltreatment. While some long-term studies on home-visitation programs for young mothers have shown potential for preventing child abuse and neglect, other existing interventions and their effectiveness need to be evaluated.

Developing data to measure progress is critical for many of the areas in injury and violence prevention. While many reliable data sources have remained constant over time, major information gaps still exist, especially for race, ethnicity, and special populations. Addressing these gaps poses a major challenge for the next decade.

Transition to *Healthy People 2010*

The structure of Healthy People changed significantly for Priority Area 7—Violent and Abusive Behavior and Priority Area 9—Unintentional Injuries. For several reasons, these two areas were combined into one *Healthy People 2010* Focus Area titled "Injury and Violence Prevention." One consideration for merging the two subjects was having all of the unintentional injury and violence-related objectives in one place to facilitate a better focus on the entire injury area. Another consideration was that many injuries produce the same outcome but result from different causal factors. For example, a nonfatal spinal cord injury can be caused by an unintentional event, such as a motor vehicle crash, or by a violence-related event, such as a domestic dispute or attempted robbery. Finally, the same interventions can reduce injuries for both unintentional and violence-related injuries. For instance, efforts to promote proper storage of firearms in homes can help reduce the risk of unintentional and intentionally self-inflicted, or assaultive firearm-related injuries in the home.

Overall, there are fewer objectives for the two subject areas. The *Healthy People 2000* had 45 objectives in the Unintentional Injuries and Violent and Abusive Behavior chapters compared with 39 objectives in *Healthy People 2010* Injury and Violence Prevention chapter. For unintentional injuries *Healthy People 2000* had 29 objectives compared with 19 objectives in the *Healthy People 2010* edition. Violent and Abusive Behaviors had 19 objectives in *Healthy People 2000* compared with 8 objectives in *Healthy People 2010*. The *Healthy People 2010* chapter has a new section titled "Injury Prevention" containing 12 objectives that relate to both subject areas (for example, nonfatal head injuries and nonfatal spinal cord injuries, child fatality review, emergency department and hospital discharge surveillance systems).

Additionally, some *Healthy People 2000* objectives were eliminated because they either lacked baseline data, a national data source, progress, standard definitions, or were too multifaceted and could not be tracked. Some objectives were revised for *Healthy People 2010*. For example, objective **7.13** (unexplained child death review systems) exceeded the year 2000 target but was revised as a developmental objective (an objective without current baseline data) for *Healthy People 2010*. The revised objective is more specific and will measure State-level child fatality reviews of deaths for children 14 years of age and under. The year 2000 objective was more general and did not state a specific age group. In general for *Healthy People 2010*, there is greater specificity and also a better sense of the potential for baseline data and continuous tracking for the next decade. Also, for *Healthy People 2010*, all age-adjusted rates use a year 2000 standard population.

Many injuries and injury-related deaths occur in specific population groups (such as infants, children, and the elderly) where the intentionality of the injury is unknown and requires more detailed investigation. Examination of these cases, documentation of the events, and surveillance efforts can help communities to better understand the causes and to develop interventions to prevent injuries which are a growing public health concern for the Nation.

The *Healthy People 2010* objective for homicide, which was retained from *Healthy People 2000* (with a minor variation), has been designated as a measure of one of the Leading Health Indicators (LHI). Homicide data are the most accurate violent crime data collected and as such are a reliable indicator of violent crime in general. The LHIs are discussed in further detail in the Introduction.

Two objectives were transferred to Focus Area 18—Mental Health and Mental Disorders: Suicides, and adolescent suicide attempts.

Healthy People 2010 contains 19 other related objectives within 6 other focus areas. Those related areas are: Focus Area 1, Access to Quality Health Services, with three related objectives; Focus Area 7, Educational and Community-Based Programs, with one objective; Focus Area 8, Environmental Health, with three objectives; Focus Area 18, Mental Health and Mental Disorders, with two related objectives; Focus Area 20, Occupational Safety and Health, with four objectives; and Focus Area 26, Substance Abuse, with six related objectives.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Objective **7.1** (homicide) is monitored using data from the National Vital Statistics System (NVSS) and excludes homicides attributed to legal intervention. It should be noted that the number of States reporting Hispanic origin data in their vital statistics has varied from year to year (see Appendix). The data on spousal homicide (**7.1b**) are from the Federal Bureau of Investigation; the 1993 and 1994 data are for spouses 15 years of age and over and are not directly comparable to previous data.

Objective **7.2** (suicide) is monitored using data from the NVSS. The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (15).

Update data for objective **7.4** were collected using a different definition—the endangerment standard—than the baseline, so the data points are not directly comparable.

The baseline and target for objective **7.5** (partner abuse) were established using the National Institute of Mental Health's survey of family violence, which measured incidents of violence among couples. This survey will not be repeated, so the objective is monitored using data from the Bureau of Justice Statistics' National Crime Victimization Survey that is tracking violence between intimates (for example, spouses, ex-spouses, or boyfriends). The data used to track the objective report incidents per 1,000 women, which reflects the intent of the objective.

Data for objectives **7.6** (assault injuries) and **7.7** (rape and attempted rape) come from the National Crime Victimization Survey, which provides self-reported victimizations. The numbers of offenses reported in this survey generally exceed those reported to police and other law enforcement agencies. However, because of their personal nature, some offenses such as rape are underreported in the crime survey (16). The data for objective **7.6** include injuries from completed rapes, attempted and completed robberies with injury, and completed aggravated and simple assaults with injury. In 1992, the Survey was redesigned; the revised questions elicit higher rates for rape, other sex offenses, and crimes committed by relatives and acquaintances. The baseline for objective **7.7** has been revised using the 1992 data to reflect this measurement change.

Data for objectives **7.8** (adolescent suicide attempts), **7.9** (physical fighting among adolescents), and **7.10** (weapon carrying) are measured using the school-based Youth Risk Behavior Survey (YRBS) and rely on student self-report. Self-reported suicide attempts are limited to those that occurred in the last 12 months and required medical attention. Data from the 1992 National Health Interview Survey (NHIS) youth supplement indicate higher levels of weapon-carrying and fighting among youth (14–19 years of age) not in school than among youth the same age in school, although the estimates for in-school youth were very close to the estimates for the total population (17). The NHIS supplement did not include questions on suicide attempts. Because YRBS data are used for ongoing monitoring of objective **7.8**, the exclusion of adolescents not in school may underestimate youth suicide attempts. The reliance on self-report without external validation of weapon-carrying, suicide attempts, and fighting may affect the validity of these estimates, although a study by the Centers for Disease Control and Prevention indicated that the results are highly reliable (18).

Objective **7.11** (inappropriate firearm storage) is measured using data from the NHIS. The numerator is the number of people who have a firearm in or around the house that is stored loaded and unlocked. The denominator is the number of people who report having a firearm in or around the house. Data on the proportion of the total population having a firearm in or around the house are also footnoted in the summary table.

Objective **7.19** (handgun storage laws) relates to State laws that vary across States in populations targeted, penalties, and liability.

Data Comparability

The update for objective **7.15** (shelter availability for battered women) comes from the same source (National Coalition Against Domestic Violence) as the baseline, but was collected differently and is not directly comparable.

A reliable source of data for objective **7.18** (suicide prevention in jails) was not developed. The wording and baseline data for the objective were established with States as the organizational level for monitoring and implementing suicide prevention protocols in jails. Jails are usually under the jurisdiction of counties or municipalities. State-level data on jails are limited; the alternative data track the objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, were only available for

1993. Additional data are from the American Correctional Association's (ACA) list of jails that are ACA-accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

Data Availability

Data are not currently available for objectives **7.12** (emergency room protocols), **7.14** (followup on abused children), and **7.17** (comprehensive violence prevention programs). No update was obtained for objective **7.16** (conflict resolution), which met its target at baseline.

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Table 7. Violent and Abusive Behavior objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	7.1	**Homicide** (age adjusted per 100,000)	1987	8.5	10.1	10.8	10.3	10.6	10.1	9.2	8.3	7.8	7.1	- - -	7.2
		a. Children 3 years and under (per 100,000)	1987	3.9	4.4	4.9	4.5	4.9	4.6	4.5	4.5	4.3	4.4	- - -	3.1
		b. Spouses 15–34 years (per 100,000)	1987	1.7	[1]1.5	[2]1.1	[2]1.1	[2]1.1	[2]1.0	- - -	- - -	- - -	- - -	- - -	1.4
		c. Black male 15–34 years (per 100,000)	1987	91.1	130.5	140.8	134.2	140.5	133.8	114.6	105.7	97.6	84.9	- - -	72.4
		d. Hispanic male 15–34 years (per 100,000)[3]	1987	41.3	53.2	55.7	56.8	52.4	52.2	49.7	39.2	34.9	33.5	- - -	33.0
		e. Black female 15–34 years (per 100,000)	1987	20.2	22.1	24.1	22.7	23.7	21.0	18.5	16.1	14.4	13.3	- - -	16.0
		f. American Indian/Alaska Native (age adjusted per 100,000)	1987	11.2	10.7	12.2	10.3	10.7	11.8	11.5	9.9	10.8	9.5	- - -	9.0
■	7.2*	**Suicide** (age adjusted per 100,000)	1987	11.7	11.5	11.4	11.1	11.3	11.2	11.2	10.8	10.6	10.4	- - -	10.5
		a. Adolescents 15–19 years (per 100,000)	1987	10.2	11.1	11.0	10.8	10.9	11.1	10.5	9.7	9.5	8.9	- - -	8.2
		b. Male 20–34 years (per 100,000)	1987	25.2	25.1	25.1	24.5	25.5	26.5	26.3	24.2	23.4	22.9	- - -	21.4
		c. White male 65 years and over (per 100,000)	1987	46.7	44.4	42.7	41.0	40.9	38.9	38.7	37.8	36.1	38.2	- - -	39.2
		d. American Indian/Alaska Native male (age adjusted per 100,000)	1987	20.1	21.0	19.2	17.9	18.7	23.8	20.1	20.0	21.3	21.4	- - -	17.0
■	7.3	**Firearm-related deaths** (age adjusted per 100,000)	1990	14.6	. . .	15.2	14.9	15.6	15.1	13.9	12.9	12.2	11.3	- - -	11.6
		a. Black	1990	33.4	. . .	35.4	34.4	37.6	35.5	30.3	28.5	25.7	22.7	- - -	30.0
☐	7.4	**Child abuse and neglect** (per 1,000)	1986	22.6	- - -	- - -	- - -	41.9	- - -	- - -	- - -	- - -	- - -	- - -	Less than 2
		Incidence of types of maltreatment													
		a. Physical abuse	1986	4.9	- - -	- - -	- - -	[4]9.1	- - -	- - -	- - -	- - -	- - -	- - -	Less than 4
		b. Sexual abuse	1986	2.1	- - -	- - -	- - -	[4]4.5	- - -	- - -	- - -	- - -	- - -	- - -	Less than 2
		c. Emotional abuse	1986	3.0	- - -	- - -	- - -	[4]7.9	- - -	- - -	- - -	- - -	- - -	- - -	Less than 3
		d. Neglect	1986	14.6	- - -	- - -	- - -	[4,5]29.2	- - -	- - -	- - -	- - -	- - -	- - -	Less than 1
☐	7.5	**Partner abuse** (per 1,000 couples)	1985	30.0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	27.0
		Assaults by intimates (per 1,000 females 12 years and over)[6]	. . .	- - -	- - -	- - -	8.8	9.8	9.1	8.6	7.5	- - -	7.2	- - -	. . .
☐	7.6	**Assault injuries** (per 1,000 people 12 years and over)[6]	1986	9.7	10.3	11.0	9.3	12.3	12.7	11.7	10.5	- - -	10.2	- - -	8.7
☐	7.7	**Rape and attempted rape** (per 100,000)[6]													
		Female 12 years and over	1992	[5]332	. . .	. . .	. . .	267	273	193	144	156	160	- - -	108
		a. Female 12–34 years	1992	[5]607	. . .	. . .	. . .	477	527	374	249	349	- - -	- - -	225
		Sexual assaults (per 100,000 females 12 years and over)	1992	184	. . .	. . .	. . .	138	96	84	84	102	110	- - -	. . .
☐	7.8*	**Suicide attempts among adolescents 14–17 years**	1990	2.1%	. . .	1.7%	- - -	2.7%	- - -	2.8%	- - -	2.6%	- - -	2.6%	1.8%
		a. Female 14–17 years	1991	2.5%	. . .	. . .	- - -	3.8%	- - -	3.4%	- - -	3.3%	- - -	3.1%	2.0%
■	7.9	**Physical fighting among adolescents 14–17 years** (incidents per 100 students per month)	1991	137	. . .	. . .	- - -	137	- - -	128	- - -	115	- - -	106	110
		a. Non-Hispanic black male 14–17 years	1991	207	. . .	. . .	- - -	203	- - -	181	- - -	175	- - -	159	160

See footnotes and key at end of table.

Table 7. Violent and Abusive Behavior objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	7.10	**Weapon-carrying by adolescents 14–17 years** (incidents per 100 students per month)	1991	107	...	...	---	92	---	81	---	74	---	68	86
		a. Non-Hispanic black adolescents 14–17	1991	134	...	...	---	117	---	85	---	84	---	71	105
☐	7.11	**Proportion of people 18 years and over with firearms in the home that are stored loaded and unlocked**	1994	[7]20%	...	...	...	...	...	---	---	---	[7]19%	---	16%
☐	7.12	**Emergency room protocols for victims of violence**	...	---	---	---	---	---	---	---	---	---	---	---	90%
■	7.13	**Number of States with child death review systems**	1991	33	...	...	32	---	40	---	[8]48	---	---	---	45
☐	7.14	**Number of States that followup abused children**	...	---	---	---	---	---	---	---	---	---	---	---	30
■	7.15	**Battered women turned away from shelters**	1987	40%	---	---	---	---	---	---	66%	---	---	---	10%
■	7.16	**Conflict resolution in a required course**													
		Proportion of middle/junior and senior high schools	1994	58.3%	...	...	...	...	...	---	---	---	---	---	50%
☐	7.17	**Local comprehensive violence prevention programs**	...	---	---	---	---	---	---	---	---	---	---	---	80%
■	7.18*	**Suicide prevention in jails**													
		Number of States meeting nationally recognized suicide prevention standards	1992	[§]2	...	...	...	---	---	2	1	---	---	---	50
		Proportion of jails with suicide policies	...	---	---	---	---	79.5%	---	---	---	---	---	---	...
		Proportion of jails with ACA accreditation	...	---	1%	1%	1%	2%	2%	2%	---	---	---	3%	...
☐	7.19*	**Number of States with firearm storage laws**	1989	[§]1	1	5	8	11	13	15	15	15	15	18	50

--- Data not available.
. . . Category not applicable.
[§] Baseline has been revised.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

[1] 1989 data.

[2] Includes married men and women aged 15 and older. Data include deaths from legal intervention (E970–E978) in addition to E960–E969 and are not comparable to other data for this objective.

[3] Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.

[4] Rates were computed using the Endangerment Standard.

[5] Rate includes both physically and emotionally neglected children.

[6] The victimization survey was redesigned in 1992. The revised questions elicit higher rates for rape, other sex offenses, and crimes committed by relatives and acquaintances.

[7] In 1994, 37.4 percent reported having a firearm in or around the home; in 1998, this number decreased to 35 percent.

[8] Number includes State teams in 38 States and the District of Columbia, and 9 additional States where county/local teams serve the majority of the population at risk.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
7.1, 7.1a–f	National Vital Statistics System, CDC, NCHS.
7.1b	Numerator obtained from DOJ, FBI.
7.2*, 7.2a–d	National Vital Statistics System, CDC, NCHS.
7.3	National Vital Statistics System, CDC, NCHS.
7.4, 7.4a–d	National Incidence of Child Abuse and Neglect Survey, Administration for Children and Families, NCCAN.
7.5	Baseline: National Family Violence Survey, NIH, NIMH. 1992–96 and 1998 data: National Crime Victimization Survey, DOJ, BJS.
7.6	National Crime Victimization Survey, DOJ, BJS.
7.7, 7.7a	National Crime Victimization Survey, DOJ, BJS.
7.8,7.8a*	Youth Risk Behavior Survey, CDC, NCCDPHP.
7.9	Youth Risk Behavior Survey, CDC, NCCDPHP.
7.10	Youth Risk Behavior Survey, CDC, NCCDPHP.
7.11	National Health Interview Survey, CDC, NCHS.
7.13	Baseline: Annual 50-State Survey, National Committee for Prevention of Child Abuse. Updates: National Incidence of Child Abuse and Neglect Survey, Administration for Children and Families, NCCAN.
7.15	Domestic Violence Statistical Survey, National Coalition Against Domestic Violence.
7.16	School Health Policies and Programs Study, CDC, NCCDPHP.
7.18*	Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives. Baseline (suicide policies): National Census of Jails, DOJ, BJS. Baseline and update (ACA accreditation): American Correctional Association.
7.19*	Office of Planning, Evaluation and Legislation, CDC, NCIPC; National Conference of State Legislatures.

* Duplicate objective. See full text of objective following this table.

Violent and Abusive Behavior Objectives

7.1: Reduce homicides to no more than 7.2 per 100,000 people.

7.1a: Reduce homicides among children aged 3 and younger to no more than 3.1 per 100,000 children.

7.1b: Reduce homicides among spouses aged 15–34 to no more than 1.4 per 100,000.

7.1c: Reduce homicides among black men aged 15–34 to no more than 72.4 per 100,000.

7.1d: Reduce homicides among Hispanic men aged 15–34 to no more than 33.0 per 100,000.

7.1e: Reduce homicides among black women aged 15–34 to no more than 16.0 per 100,000.

7.1f: Reduce homicides among American Indians and Alaska Natives to no more than 9.0 per 100,000.

7.2*: Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 6.1

7.2a*: Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 6.1a

7.2b*: Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 6.1b

7.2c*: Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 6.1c

7.2d*: Reduce suicides among American Indian and Alaska Native men to no more than 17.0 per 100,000.

Duplicate objective: 6.1d

7.3: Reduce firearm-related deaths to no more than 11.6 per 100,000 people from major causes.

7.3a: Reduce firearm-related deaths among blacks to no more than 30.0 per 100,000 people from major causes.

7.4: Reverse to less than 22.6 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

7.4a: Reverse to less than 4.9 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

7.4b: Reverse to less than 2.1 per 1,000 children the rising incidence of sexual abuse of children younger than age 18.

7.4c: Reverse to less than 3.0 per 1,000 children the rising incidence of emotional abuse of children younger than age 18.

7.4d: Reverse to less than 14.6 per 1,000 children the rising incidence of neglect of children younger than age 18.

7.5: Reduce physical abuse directed at women by male partners to no more than 27 per 1,000 couples.

7.6: Reduce assault injuries among people aged 12 and older to no more than 8.7 per 1,000.

7.7: Reduce rape and attempted rape of women aged 12 and older to no more than 108 per 100,000 women.

7.7a: Reduce rape and attempted rape of women aged 12–34 to no more than 225 per 100,000.

7.8*: Reduce to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 6.2

7.8a*: Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 6.2a

7.9: Reduce to 110 per 100 the incidents of physical fighting among adolescents aged 14–17.

7.9a: Reduce to 160 per 100 the incidents of physical fighting among black males aged 14–17.

7.10: Reduce to 86 per 100 the incidents of weapon-carrying by adolescents aged 14–17.

7.10a: Reduce to 105 per 100 the incidents of weapon-carrying by blacks aged 14–17.

7.11: Reduce by 20 percent the proportion of people who possess weapons that are inappropriately stored and therefore dangerously available.

7.12: Extend protocols for routinely identifying, treating, and properly referring suicide attempters, victims of sexual assault, and victims of spouse, elder, and child abuse to at least 90 percent of hospital emergency departments.

7.13: Extend to at least 45 States implementation of unexplained child death review systems.

7.14: Increase to at least 30 the number of States in which at least 50 percent of children identified as neglected or physically or sexually abused receive physical and mental evaluation with appropriate followup as a means of breaking the intergenerational cycle of abuse.

7.15: Reduce to less than 10 percent the proportion of battered women and their children turned away from emergency housing due to lack of space.

7.16: Increase to at least 50 percent the proportion of elementary and secondary schools that teach nonviolent conflict resolution skills, preferably as a part of comprehensive school health education.

7.17: Extend coordinated, comprehensive violence prevention programs to at least 80 percent of local jurisdictions with populations over 100,000.

7.18*: Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 6.10

7.19*: Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 9.25

*Duplicate objective.

Priority Area 8 Educational and Community-Based Programs

Background

Educational and community-based programs are instrumental in creating an environment that is conducive to leading a healthy lifestyle. These programs, designed to reach people outside of the traditional health care setting, are fundamental to promoting health and increasing the quality of life by producing a supportive social and physical environment capable of reinforcing positive behaviors and changing negative behaviors that contribute to many of today's leading health threats.

Health and quality of life rely on much more than a well-functioning health and medical care system; they depend on the community to encourage and provide leadership, collaboration, and initiatives that are fundamental to progress. To successfully address health and quality of life issues, communities must draw on many components including public health, health care, civic, voluntary health, and faith organizations; local governments; schools; park and recreation departments; and other interested groups as well as private citizens. Working within existing systems or networks, such as schools or park departments, community efforts can yield results that can improve the health and lives of a large segment of the population. While some community-based programs address a single risk factor or prominent health problem, others are taking a more comprehensive, holistic approach to health and healthy communities.

Data Summary

Highlights

The average number of years of healthy life for the total population (8.1) increased from a baseline of 64 years in 1990 to 65.2 years in 1998, exceeding the *Healthy People 2000* target. Among special populations targeted by the objective, Hispanics met the year 2000 target, while progress was made for blacks and older adults.

High school completion rates (8.2) remained relatively stable compared with their 1992 baselines. Worksites with 50 or more employees that provided employee health promotion programs (8.6) saw significant growth and exceeded the year 2000 target, while the participation of blue-collar employees 18 years of age and over in these programs (8.7) declined from the 1994 baseline, yet still met their target. The proportion of hospitals offering community health promotion programs (8.12) also met its target. Family discussion of health issues with children 10 years of age and over (8.9) moved away from its target.

Summary of Progress

Of the 14 Educational and Community-Based Programs objectives, 4 met (**8.1, 8.6, 8.7,** and **8.13**) and 2 progressed (**8.12** and **8.14**) toward the year 2000 targets. One objective (**8.8**) showed no change from baseline while two objectives (**8.3** and **8.9**) showed mixed progress. Two objectives (**8.2** and **8.3**) moved away from the year 2000 targets. Five objectives could not be assessed because they either lacked data beyond the baseline data (**8.4, 8.5, 8.8,** and **8.11**) or because they had proxy data but lacked baseline data (**8.10**). See table 8 for the tracking data for the objectives in this priority area and figure 8 for a quantitative assessment of progress.

Discussion

In the past decade, the Nation has seen progress in a number of areas—but greater achievements are needed in the areas of educational and community-based programs. To make further headway in this area, health promotion programs need to be sensitive to the diverse cultural norms and beliefs of the people for whom the programs are intended. Achieving such sensitivity is a continuing challenge as the Nation's population becomes increasingly diverse. To ensure that interventions are culturally appropriate, linguistically competent, and appropriate for the needs of all groups (racial, ethnic, gender, sexual orientation, disability status, and age) within the community, members of the populations served, and gatekeepers must be involved in the community assessment and planning process (1).

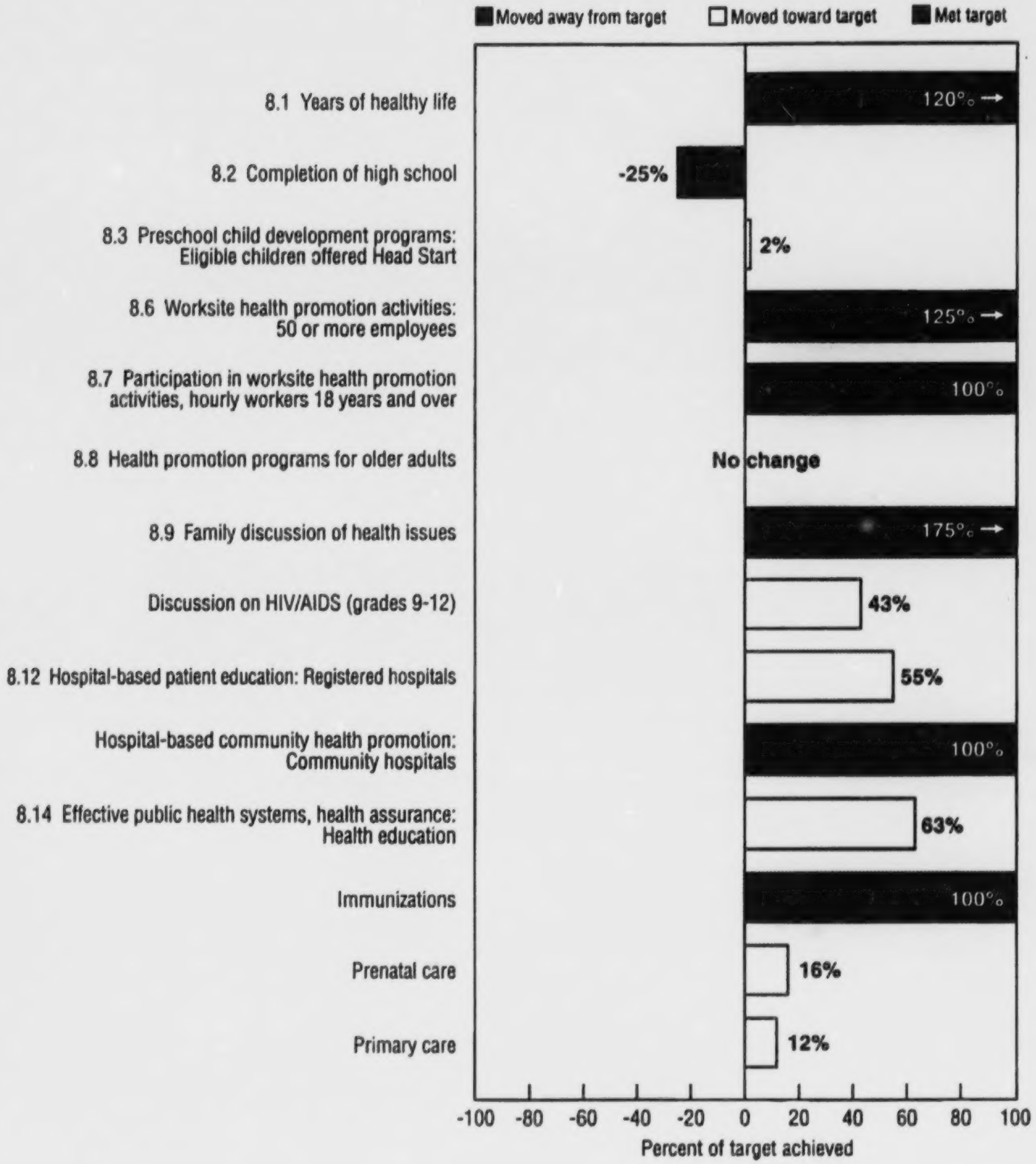
Community assessment helps to identify the cultural traditions and beliefs of the community and the education, literacy level, and language preferences necessary for the development of appropriate materials and programs. In addition, a community assessment can help identify levels of social capital and community capacity. Such assessments help identify the skills, resources, and abilities needed to manage health improvement programs in communities (2,3).

Educational and community-based programs must be supported by accurate, appropriate, and accessible information derived from a science base. Increasing evidence supports the efficacy and effectiveness of health education and health promotion in schools, worksites, health care facilities, and community-based programming (4). Gaps in research include the dissemination and diffusion of effective programs, new technologies, policies, relationships between settings, and approaches to disadvantaged and special populations (5).

Communities need to be involved as partners in conducting research ensuring that the content of the prevention efforts developed is tailored to meet the needs of the communities and populations being served. Communities also need to be involved as equal partners in research to enhance the appropriateness and sustainability of science-based interventions and prevention programs and ensure that the lessons of research are transferred back to the community. Sustainability is necessary for successful research to be translated into programs of lasting benefit to communities.

The impact of social ecology on behavior and the successes of environmental and policy approaches to health promotion and disease prevention need further documentation. Techniques to evaluate community processes and community health improvement methods and models need to be refined and disseminated so that other communities can learn from and duplicate successful strategies. Issues of partnering and the role of collaborative efforts to increase the capacity of individuals and communities to achieve long-term outcomes and improvements in health status are not fully understood (2) and should be evaluated. Mechanisms need to be developed to share what is learned in an appropriate and timely manner with communities.

Figure 8. Final status of Educational and Community-Based Programs objectives



NOTE: Complete tracking data are shown in table 8. Progress quotients are not calculated for objectives 8.4, 8.5, 8.10, 8.11, and 8.13. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

Transition to *Healthy People 2010*

The *Healthy People 2010* focus area on Educational and Community-Based Programs has been reorganized to emphasize four major settings—schools (including colleges and universities), worksites, health care sites, and the community; and three major intervention strategies, educational, policy, and environmental. The four settings serve as channels to reach desired audiences as well as apply strategies in as broad a population as possible. Among the more effective community health promotion programs are those that implement comprehensive intervention plans with multiple intervention strategies, such as educational, policy, and environmental within these various settings. These settings also provide major social structures for intervening at the policy level to facilitate healthful choices (3).

Thus in *Healthy People 2010*, the objectives are organized by setting, with objectives addressing special populations included in the community setting. The objectives also reflect a mix of educational, policy, and environmental strategies. In the school setting, the objective addressing high school completion was retained as was the objective addressing school health education, but because of measurement difficulties, health behaviors that account for the majority of morbidity and mortality were emphasized rather than a comprehensive school health education. Health risk behavior information for colleges and universities was also retained. A new objective regarding the school nurse to student ratio was added to address the rapidly increasing number of children who need health care during the school day.

Under the worksite setting, objectives addressing the provision of worksite health promotion and employee participation in worksite health promotion activities were both retained.

Under the health care setting, the objective on hospital-based patient education and community health promotion was expanded to three separate objectives, with some modifications. The three objectives address the provision of patient and family education, satisfaction with patient and family education received, and finally, on health care organizations sponsorship of community health promotion activities. The focus on health care organizations expands the previous focus on hospitals. Health care organizations are defined to include hospitals, managed care organizations, home health organizations, long-term care facilities, and community-based health care organizations.

Under the community setting, the objective measuring community health promotion programs addressing Healthy People focus areas was retained targeting multiple healthy focus areas instead of a specific number. The objective addressing culturally appropriate and linguistically competent community health promotion was modified to reflect the new Healthy People focus areas. The objective addressing older adult participation in health promotion activities was also retained.

Objectives addressing years of healthy life, preschool child development programs, family discussion of health issues, television partnerships with community organizations for health promotion, and effective public health systems were dropped. A modified version of the latter objective was retained in the new Healthy People focus area called Public Health Infrastructure. Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

Years of Healthy Life

Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track this objective in three priority areas (**8.1**, **17.1**, and **21.1**). The data used to track the objective come from the National Vital Statistics System (mortality) and the National Health Interview Survey (NHIS) (morbidity). The NHIS was redesigned in 1997 and, therefore, data for 1997–98 may not be comparable with those from previous years. See the Appendix for a discussion of the changes to the NHIS. The methodology for the *Healthy People 2000* years of healthy life measure, developed by NCHS and outside consultants, is published in *Healthy People Statistical Notes* series (6).

Definitions

Objective **8.4** does not include a definition of comprehensive school health education. However, the Centers for Disease Control and Prevention (CDC) uses an operational definition that includes eight elements (2). Data for the variables from the 1994 School Health Policies and Programs Study (SHPPS) used to measure these elements are shown in table 8. Schools must have addressed all elements of the operational definition to meet the criteria for comprehensive school health education. In 1994, only 2.3 percent of schools included all eight elements.

Objective **8.7** asks for the proportion of hourly workers who participated regularly in employer-sponsored health promotion activities. The 1994 baseline indicates the number of people who participated in employer-sponsored health promotion programs in the past year in the following occupational categories:

- Precision production, craft, and repair occupations
- Operators, fabricators, and laborers
- Transportation and material moving occupations
- Handlers, equipment cleaners, helpers, and laborers

Family discussions of health issues (**8.9**) are defined as discussions in the past month among family members 10 years of age and over about the following topics: nutrition, exercise, safety, tobacco use, sexual behavior/sexually transmitted diseases, or illegal drugs. In 1994, 83 percent of people had discussed at least one of these topics with family members in the month prior to interview. This exceeds the year 2000 target of 75 percent.

Data Sources

The data used to track objectives **8.2** (completion of high school) and **8.3** (preschool child development programs) come from the National Center for Education Statistics (NCES) (7). Both objectives **8.2** and **8.3** are consistent with the National Education Goals. The data for objective **8.2** include those who received high school diplomas as well as those who received alternative credentials, such as a General Education

Development (GED) certificate. Data for 1992 and 1993 are for persons 19–20 years of age. Beginning with data for 1994, figures for high school completion are available only for people 18–24 years of age.

Data for objective **8.6** (worksite health promotion programs) are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Some of the businesses surveyed had multiple worksites with different health promotion activities. Additionally, both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities.

Proxy Data and Data Availability

Proxy data for 1992–93 from the National Association of City and County Health Officials are shown for objective **8.10**. These data show the percent of the 43 reporting States in which at least 90 percent of local health departments reported providing services that addressed three or more *Healthy People 2000* priority areas. The data represent the local health departments' report of whether a program or service existed. The survey did not determine whether the program or service was a health promotion effort that involved citizen participation, included community assessment, or had measurable objectives. Information on the proportion of the State population reached by the services or programs was not available.

Objective **8.11** is measured using proxy data from the local health departments obtained through the National Profile of Local Health Departments, NACCHO. The objective was developed to track the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations.

Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State. Baseline data for objective **8.11** represent the proportion of local health departments who indicated they provided programs or interventions in the past year that were adapted to meet the special language and cultural needs of any racial/ethnic minority population served. Local health departments included are those in which a racial or ethnic minority group constitutes more than 10 percent of the population. Data shown are the proportion of local health departments providing culturally and linguistically appropriate programs by *Healthy People 2000* priority area.

The Media Health Partnerships Survey was developed by CDC to measure partnerships between network television affiliates and community health organizations (objective **8.13**). The survey, conducted September 1995–January 1996, determined that all television network affiliates in the top 20 media markets devote a substantial effort to health promotion and disease prevention through partnerships with community groups, organizations, and/or agencies. Based on these findings, objective **8.13** has been achieved and the survey will not be repeated.

Objective **8.14**, which focuses on the proportion of people served by local health departments, is being monitored by the proportion of health departments carrying out the core functions of public health. The core functions of public health have been defined as assessment, policy development, and assurance. Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.

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Table 8. Educational and Community-Based Programs objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	8.1*	**Years of healthy life**	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.2	[4]64.8	[4]65.2	---	65
		a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	[4]57.4	[4]57.8	---	60
		b. Hispanic[1]	1990	64.8	...	63.6	[2]64.0	63.2	64.2	64.0	64.7	[4]65.8	[4]66.3	---	65
		c. People 65 years and over[3]	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	[4]12.0	[4]12.2	---	14
☐	8.2	**Completion of high school** (18–24 years)	1992	[5]86%	...	...	...	86%	86%	85%	86%	86%	85%	---	90%
		a. Hispanic	1992	[5]62%	...	...	...	64%	62%	63%	67%	67%	63%	---	90%
		b. Black	1992	[5]82%	...	...	...	82%	83%	84%	82%	82%	81%	---	90%
☐	8.3	**Preschool child development programs**													
		Eligible children 4 years afforded opportunity to enroll in Head Start	1990	47%	...	55%	---	---	---	---	---	40%	48%	---	100%
		Low-income children receiving 1 year of Head Start services prior to entering kindergarten or first grade	...	---	---	---	58%	57%	58%	54%	49%	---	---	---	...
		Disabled children 3–5 years enrolled in preschool	...	---	---	56%	---	56%	---	63%	62%	---	---	73%	...
☐	8.4	**Schools with comprehensive school health education**													
		All eight criteria met	1994	2.3%	...	...	...	...	...	---	---	---	---	---	75%
		A documented, sequential program	1994	[5]48%	...	...	...	...	...	---	---	---	---	---	...
		At least one health education course	1994	[5]77%	...	...	...	...	...	---	---	---	---	---	...
		Instruction in six key behavioral areas	1994	[5]47%	...	...	...	...	...	---	---	---	---	---	...
		Focus on skill development	1994	[5]39%	...	...	...	...	...	---	---	---	---	---	...
		Health education teachers adequately trained	1994	53%	...	...	...	...	...	---	---	---	---	---	...
		Designated coordinator for health education	1994	38%	...	...	...	...	...	---	---	---	---	---	...
		Involvement of parents, health professionals, and other concerned community members	1994	[5]31%	...	...	...	...	...	---	---	---	---	---	...
		Evaluation of health education program during the past 2 years	1994	[5]67%	...	...	...	...	...	---	---	---	---	---	...
☐	8.5	**Health promotion in post-secondary institutions**													
		Higher education institutions offering health promotion activities	1989–90	20%	...	---	---	---	---	---	---	---	---	---	50%
		College students 18–24 years who report receiving information from their college or university on:													
		Tobacco use prevention	...	---	---	---	---	---	---	32%	---	---	---	---	...
		Alcohol and other drug use prevention	...	---	---	---	---	---	---	59%	---	---	---	---	...
		Violence prevention	...	---	---	---	---	---	---	38%	---	---	---	---	...
		Injury prevention and safety	...	---	---	---	---	---	---	26%	---	---	---	---	...
		Suicide prevention	...	---	---	---	---	---	---	21%	---	---	---	---	...
		Pregnancy prevention	...	---	---	---	---	---	---	34%	---	---	---	---	...
		Sexually transmitted disease prevention	...	---	---	---	---	---	---	53%	---	---	---	---	...
		AIDS or HIV infection prevention	...	---	---	---	---	---	---	58%	---	---	---	---	...
		Dietary behaviors and nutrition	...	---	---	---	---	---	---	34%	---	---	---	---	
		Physical activity and fitness	...	---	---	---	---	---	---	40%	---	---	---	---	

See footnotes and key at end of table.

Table 8. Educational and Community-Based Programs objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	8.6	**Worksite health promotion activities**													
		Worksites with 50 or more employees (using 1985 analysis)	1985	65%	---	---	81%	---	---	---	---	---	---	90%	85%
		Worksites with 50 or more employees (using 1992 analysis)	...	---	---	---	92%	---	---	---	---	---	---	---	...
		Medium and large companies having a wellness program	1987	63%	---	---	---	---	---	---	---	---	---	---	85%
■	8.7	**Hourly workers 18 years and over participating in health promotion activities**	1994	[6]23%	...	...	...	...	...	---	---	---	20%	---	20%
☐	8.8	**Health promotion programs for older adults**													
		People 65 years and over participating in at least one health promotion program through a facility serving older adults	1995	12%	...	...	...	...	...	...	---	---	12%	---	90%
▨	8.9	**Family discussion of health issues—persons 10 years and over**	1994	83%	...	...	...	...	...	---	---	---	69%	---	75%
		Nutrition	...	---	---	---	---	---	67%	---	---	---	54%	---	...
		Physical activity	...	---	---	---	---	---	66%	---	---	---	48%	---	...
		Sexual behavior	...	---	---	---	---	---	39%	---	---	---	22%	---	...
		Tobacco	...	---	---	---	---	---	47%	---	---	---	33%	---	...
		Alcohol	...	---	---	---	---	---	38%	---	---	---	26%	---	...
		Illegal drugs	...	---	---	---	---	---	33%	---	---	---	22%	---	...
		Safety	...	---	---	---	---	---	50%	---	---	---	41%	---	...
		Among 9th–12th grade students engaging in family discussion of HIV/AIDS	1989	54%	53%	61%	---	66%	---	63%	---	63%	---	---	75%
☐	8.10	**Number of States with community health programs addressing at least three *Healthy People 2000* objectives that reach 40% of State population**	...	---	---	---	---	---	---	---	---	---	---	---	50
		Proportion of States with 90 percent of local health departments providing services that address three or more *Healthy People 2000* priority areas	...	---	---	---	---	[4]81%	---	---	---	---	---	---	...
☐	8.11	**Counties with programs for racial/ethnic minority groups**	...	---	---	---	---	---	---	---	---	---	---	---	50%
		Percent of local health departments providing culturally and linguistically appropriate services													
		Health promotion													
		Physical activity and fitness	1996–97	21%	...	...	...	...	...	...	...	...	---	---	50%
		Nutrition	1996–97	44%	...	...	...	...	...	...	...	...	---	---	50%
		Tobacco	1996–97	24%	...	...	...	...	...	...	...	...	---	---	50%
		Alcohol and other drugs	1996–97	26%	...	...	...	...	...	...	...	...	---	---	50%
		Family planning	1996–97	42%	...	...	...	...	...	...	...	...	---	---	50%
		Mental health and mental disorders	1996–97	18%	...	...	...	...	...	...	...	...	---	---	50%
		Violent and abusive behavior	1996–97	25%	...	...	...	...	...	...	...	...	---	---	50%
		Education and community-based programs	1996–97	33%	...	...	...	...	...	...	...	...	---	---	50%

See footnotes and key at end of table.

Table 8. Educational and Community-Based Programs objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Health protection													
		Unintentional injuries	1996–97	19%	...	...	...	...	...	...	...	...	---	---	50%
		Occupational safety and health	1996–97	13%	...	...	...	...	...	...	...	...	---	---	50%
		Environmental health	1996–97	22%	...	...	...	...	...	...	...	...	---	---	50%
		Food and drug safety	1996–97	18%	...	...	...	...	...	...	...	...	---	---	50%
		Oral health	1996–97	25%	...	...	...	...	...	...	...	...	---	---	50%
		Preventive services													
		Maternal and infant health	1996–97	47%	...	...	...	...	...	...	...	...	---	---	50%
		Heart disease and stroke	1996–97	28%	...	...	...	...	...	...	...	...	---	---	50%
		Cancer	1996–97	30%	...	...	...	...	...	...	...	...	---	---	50%
		Diabetes and other chronic disabling conditions	1996–97	26%	...	...	...	...	...	...	...	...	---	---	50%
		HIV infection	1996–97	45%	...	...	...	...	...	...	...	...	---	---	50%
		Sexually transmitted diseases	1996–97	41%	...	...	...	...	...	...	...	...	---	---	50%
		Immunization and infectious diseases	1996–97	48%	...	...	...	...	...	...	...	...	---	---	50%
		Clinical preventive services	1996–97	35%	...	...	...	...	...	...	...	...	---	---	50%
		Surveillance and data systems	1996–97	14%	...	...	...	...	...	...	...	...	---	---	50%
☐	8.12	**Hospital-based patient education and community health promotion**													
		Patient education programs													
		Registered hospitals	1987	68%	86%	---	---	90%	---	---	---	---	---	80%	90%
		Health maintenance organizations	...	---	---	---	---	90%	---	---	---	---	---	---	90%
		Health education classes	...	---	[5]75%	---	84%	...	---	---	---	---	---	---	...
		Nutrition counseling	...	---	[5]85%	---	87%	...	---	---	---	---	---	---	...
		Smoking cessation classes	...	---	---	---	67%	...	---	---	---	---	---	---	...
		Community health promotion programs													
		Community hospitals	1987	60%	77%	---	---	90%	---	---	---	---	---	---	90%
■	8.13	**Television partnerships with community organizations for health promotion**	1995–96	100%	...	...	...	...	...	...	...	---	---	---	75%
☐	8.14	**Effective public health systems**													
		Local health departments reporting:													
		Health assessment													
		Behavioral risk assessment	1990	33%	...	---	---	---	---	---	---	---	---	---	90%
		Morbidity data	1990	49%	...	---	---	---	---	---	---	---	---	---	90%
		Reportable disease	1990	87%	...	---	---	---	---	---	---	---	---	---	90%
		Vital records and statistics	1990	64%	...	---	---	---	---	---	---	---	---	---	90%
		Surveillance — chronic disease	1990	55%	...	---	---	---	---	---	---	---	---	---	90%
		Surveillance — communicable disease	1990	92%	...	---	---	---	---	---	---	---	---	---	90%
		Policy development functions and services													
		Health code development and enforcement	1990	59%	...	---	---	---	---	---	---	---	---	---	90%
		Health planning	1990	57%	...	---	---	---	---	---	---	---	---	---	90%

See footnotes and key at end of table.

Table 8. Educational and Community-Based Programs objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	Health assurance													
	Health education	1990	74%	...	---	---	[4]84%	---	---	---	---	---	---	90%
	Child health	1990	84%	...	---	---	---	---	---	---	---	---	---	90%
	Immunizations	1990	92%	...	---	---	[4]96%	---	---	---	---	---	---	90%
	Prenatal care	1990	59%	...	---	---	[4]64%	---	---	---	---	---	---	90%
	Primary care	1990	22%	...	---	---	[4]30%	---	---	---	---	---	---	90%

--- Data not available.

... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

[§] Baseline has been revised.

[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.

[1] Estimate based on preliminary data. Excludes mortality data from States lacking a Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See Appendix.

[2] Estimate derived from 1991–93 health status data and 1992 mortality data.

[3] Years of healthy life remaining for those surviving to age 65.

[4] 1992–1993 data. Data are from 43 States and represent local health department's report of whether a program or service existed.

[5] 1988 data.

NOTES: Data include revisions and, therefore, may differ from data previously published in these reports and other publications. HIV is human immunodeficiency virus. AIDS is acquired immunodeficiency syndrome.

Objective number	Data source
8.1*, 8.1a–c	National Vital Statistics System, CDC, NCHS. National Health Interview Survey, CDC, NCHS.
8.2, 8.2a-b	National Center for Education Statistics, National Education Goals Panel.
8.3	Head Start data: Head Start Bureau: Administration on Children, Youth, and Families. Data on disabled children: National Center for Education Statistics, National Education Goals Panel.
8.4	School Health Policies and Programs Study, CDC, NCCDPHP.
8.5	Baseline: Health Promotion on Campus Survey and Directory, American College Health Association. Data for college students: National College Health Risk Behavior Survey, CDC, NCCDPHP.
8.6	Baseline and updates for worksites with 50 or more employees : National Survey of Worksite Health Promotion Activities OPHS, ODPHP. Baseline for medium and large companies: Health Research Institute Biennial Survey, Health Research Institute.
8.7	National Health Interview Survey, CDC, NCHS.
8.8	National Health Interview Survey, CDC, NCHS.
8.9	1989 baseline: Secondary School Student Health Risk Survey, CDC, NCCDPHP. 1990–97 data: Youth Risk Behavior Survey, CDC, NCCDPHP. 1994 and 1998 data: National Health Interview Survey, CDC, NCHS.
8.10	National Profile of Local Health Departments, National Association of City and County Health Officials.
8.11	National Profile of Local Health Departments, National Association of City and County Health Officials.
8.12	Annual Survey of Hospitals, AHA. HMO Industry Profile, Group Health Association of America, Inc.
8.13	Media Health Partnerships Survey, CDC, NCCDPHP.
8.14	National Profile of Local Health Departments, National Association of City and County Health Officials.

* Duplicate objective. See full text of objective following this table.

Educational and Community-Based Programs Objectives

8.1*: Increase years of healthy life to at least 65 years.

Duplicate objectives: 17.1 and 21.1

> **8.1a***: Increase years of healthy life among black persons to at least 60 years.
>
> Duplicate objectives: 17.1a and 21.1a
>
> **8.1b***: Increase years of healthy life among Hispanics to at least 65 years.
>
> Duplicate objectives: 17.1b and 21.1b
>
> **8.1c***: Increase years of healthy life among people aged 65 and older to at least 14 years remaining at age 65.
>
> Duplicate objectives: 17.1c and 21.1c

8.2: Increase the high school graduation rate to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

> **8.2a**: Increase the high school graduation rate among Hispanics to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.
>
> **8.2b**: Increase the high school graduation rate among blacks to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

8.3: Achieve for all disadvantaged children and children with disabilities access to high quality and developmentally appropriate preschool programs that help prepare children for school, thereby improving their prospects with regard to school performance, problem behaviors, and mental and physical health.

8.4: Increase to at least 75 percent the proportion of the Nation's elementary and secondary schools that provide planned and sequential kindergarten–12th grade comprehensive school health education.

8.5: Increase to at least 50 percent the proportion of postsecondary institutions with institution-wide health promotion programs for students, faculty, and staff.

8.6: Increase to at least 85 percent the proportion of workplaces with 50 or more employees that offer health promotion activities for their employees, preferably as part of a comprehensive employee health promotion program.

8.7: Increase to at least 20 percent the proportion of hourly workers who participate regularly in employer-sponsored health promotion activities.

8.8: Increase to at least 90 percent the proportion of people aged 65 and older who had the opportunity to participate during the preceding year in at least one organized health promotion program through a senior center, lifecare facility, or other community-based setting that serves older adults.

8.9: Increase to at least 75 percent the proportion of people aged 10 and older who have discussed issues related to nutrition, physical activity, sexual behavior, tobacco, alcohol, other drugs, or safety with family members on at least one occasion during the preceding month.

8.10: Establish community health promotion programs that separately or together address at least three of the Healthy People 2000 priorities and reach at least 40 percent of each State's population.

8.11: Increase to at least 50 percent the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations.

8.12: Increase to at least 90 percent the proportion of hospitals, health maintenance organizations, and large group practices that provide patient education programs, and to at least 90 percent the proportion of community hospitals that offer community health promotion programs addressing the priority health needs of their communities.

8.13: Increase to at least 75 percent the proportion of local television network affiliates in the top 20 television markets that have become partners with one or more community organizations around one of the health problems addressed by the Healthy People 2000 objectives.

8.14: Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health.

*Duplicate objective.

Priority Area 9 Unintentional Injuries

Background

Unintentional injuries are the fifth leading cause of death in the United States, accounting for more than 97,000 deaths in 1998 (1). They are a major cause of disabilities and hospitalization; in 1998 there were nearly 29 million visits to emergency rooms because of unintentional injuries (2). Unintentional injuries have a significant impact on health care costs; in 1998 alone, medical expenses attributable to unintentional injuries were estimated at nearly $80 billion; when costs for losses of income and productivity, insurance and legal administration, motor-vehicle damage, fire loss and losses by employers are included, the estimate climbs to $480.5 billion (3).

Motor vehicle injuries remain the most costly and fatal of unintentional injuries. The National Safety Council estimates motor vehicle crashes cost the United States $169 billion in lost wages, medical expenses, and administrative costs. However, efforts to reduce motor vehicle-related injuries show promise. The National Highway Traffic Safety Administration (NHTSA) estimates that if all occupants in passenger vehicles had used their safety belts, nearly one-half of the 41,000 motor vehicle deaths in 1996 could have been prevented (4). Teens are overrepresented among motor vehicle deaths. While constituting 10 percent of the total population, teenagers account for 15 percent of motor vehicle deaths (5). Implementation of graduated licensing programs may help reduce the number of teenage motor vehicle deaths (6).

Motorcyclists are also disproportionally represented among motor vehicle deaths; per mile traveled, 16 motorcyclists are killed for each automobile occupant (5). Motorcycle helmet use is associated with less severe injuries and lower health care costs (7). In 1995 alone, 791 lives would have been saved if all motorcyclists wore helmets (8). While States requiring helmet use increased during the early 1990's, the number began declining in 1997.

Alcohol use has long been recognized as contributing to motor vehicle deaths and injuries. The rate of alcohol-related motor vehicle deaths has declined between 1987 and 1999. In part, this may be attributed to improvements in the engineering and safety of motor vehicles. However, NHTSA has also highlighted the impact of the passage and enforcement of laws limiting drinking to 21 years of age and over (9).

Although less visible, fall-related injury and death rates among older persons in the United States are increasing. Falls and fall-related injuries are the second leading cause of injury deaths among people 65–84 years of age and the leading cause for people 85 years of age and over (1).

Data Summary

Highlights

Significant progress has been seen in the past decade regarding deaths due to unintentional injuries. The overall age-adjusted rate of deaths from unintentional injuries (**9.1**) decreased, from 34.7 per 100,000 persons in 1987 to 30.1 in 1998, as did the rates for special populations. The targeted components of unintentional injuries including motor-vehicle crashes (**9.3**), drowning (**9.5**), and fire (**9.6**) also decreased.

Particularly noteworthy were objectives that targeted motor vehicle fatalities and use of vehicle occupant restraints. The rate of deaths caused by motor vehicle crashes (**9.3**) decreased from 2.4 per 100 million vehicle miles traveled in 1987 to 1.6 in 1998. The rate of deaths from motor vehicle crashes per 100,000 persons also declined, from 19.2 in 1987 to 15.3 in 1998. The death rate for motorcyclists involved in collisions decreased from 42.5 per 100 million vehicle miles traveled in 1987 to 22.3 in 1998, surpassing the *Healthy People 2000* target of 25.6. The rate of motorcyclists' deaths per 100,000 persons declined from 1.7 in 1987 to 0.8 in 1998, also surpassing the target of 0.9. For pedestrians struck by motor vehicles, the death rate decreased from 2.8 per 100,000 persons in 1987 to 1.8 in 1999, exceeding the objective target of 2.0.

Corresponding to the decrease in motor vehicle deaths, the use of safety belts by motor vehicle occupants (**9.12**) increased from 42 percent in 1988 to 67 in 1999. Use of helmets by motorcyclists (**9.13**) increased from 60 percent in 1988 to 67 in 1998. The number of States with laws requiring the use of safety belts for all ages (**9.14**) increased from 33 in 1989 to 49 in 1999. The number of States having a graduated driver licensing system for novice drivers and riders under the age of 18 (**9.26**) increased from zero in 1994 to 23 in 1999.

The rate of nonfatal head injuries (**9.9**) decreased from 118 per 100,000 persons in 1988 to 61 in 1998, far surpassing the year 2000 target of 106. The rate of nonfatal spinal cord injuries (**9.10**) decreased from 5.3 per 100,000 persons in 1988 to 4.5 in 1998, also exceeding the year 2000 target of 5.0.

The rate of nonfatal poisonings requiring emergency department treatment (**9.8**) decreased from 104 visits per 100,000 persons in 1986 to 33 in 1999, well below the year 2000 target of 88. The rate for children 4 years of age and under decreased from 664 in 1986 to 418 in 1999 also surpassing the target of 520.

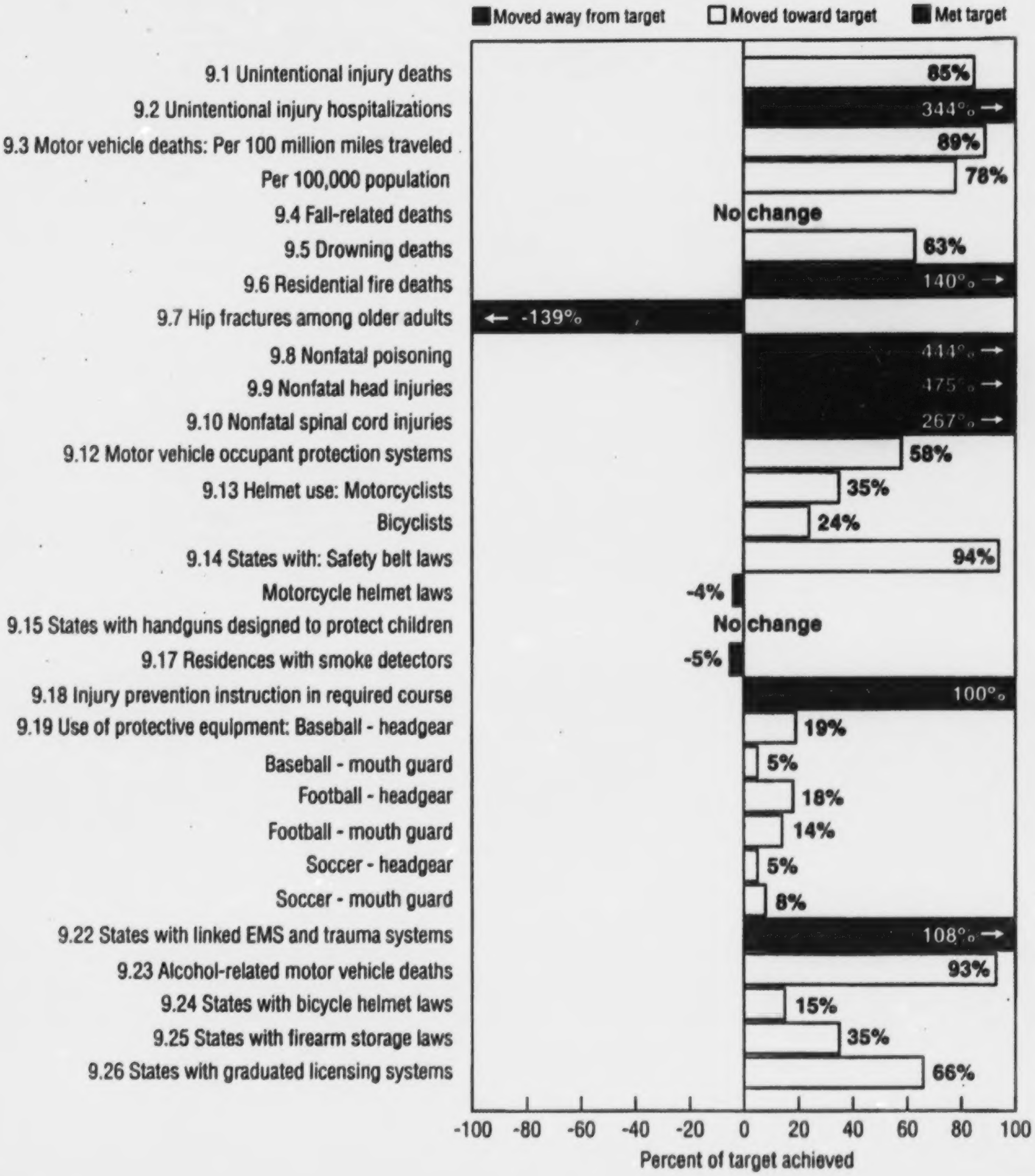
The rate of hospitalizations for nonfatal injuries (**9.2**) decreased from 832 hospitalizations per 100,000 persons in 1988 to 564 in 1998, surpassing by 34 percent the year 2000 target of 754. For black males, the rate declined from 1,007 in 1991 to 628 in 1998, surpassing the target of 856 by 36 percent.

Moving in the other direction, the hospitalization rate for hip fractures among people 65 years of age and over (**9.7**) increased from 714 hospitalizations per 100,000 persons in 1988 to 863 in 1998. However, the rate for hip fractures for white women 85 years of age and over, the group at highest risk, decreased marginally from 2,721 in 1988 to 2,690 in 1998.

Summary of Progress

By the end of the decade, targets had been met for seven objectives: **9.2**, **9.6**, **9.8–9.10**, **9.18**, and **9.22**. Eleven objectives made substantial progress: **9.1**, **9.3**, **9.5**, **9.12**, **9.13**, **9.16**, **9.19**, **9.23**, and **9.24–9.26** . The two measures used to track one objective (**9.14**) showed mixed progress. Objective **9.21** also showed mixed progress, although this was based on data only for nurse practitioners (see Data Issues). Two objectives (**9.7** and **9.17**) moved away from the *Healthy People 2000* target. However, more recent supplemental data

Figure 9. Final status of Unintentional Injuries objectives



NOTE: Complete tracking data are shown in table 9. Progress quotients are not calculated for objectives 9.11, 9.16, 9.20, and 9.21. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

for objective 9.17 (smoke detectors) does show progress in the proportion of people with a working smoke detector on each floor of their residence, 88 percent in 1998 (see Data Issues). Two objectives showed no change (9.4 and 9.15). Data sources were never developed for two objectives (9.11 and 9.20). See table 9 for the tracking data for the objectives in this priority area and figure 9 for a quantitative assessment of progress.

Discussion

The decline in the rate of deaths from motor vehicle crashes can be attributed to a combination of factors; raising the legal drinking age to 21, increased use of safety belts and child restraint seats, zero tolerance for drinking and driving by youth, stricter law enforcement, administrative license revocation, graduated driver licensing systems, and stiffer penalties upon conviction for drunk driving (10).

Alcohol continues to be a major risk factor for all unintentional injuries, contributing to an estimated 38 percent of motor vehicle-related deaths (11). Raising the minimum legal drinking age to 21 years was accompanied by reduced alcohol consumption, traffic crashes, and related fatalities among young persons under age 21 years. Reductions in alcohol-related traffic crashes are associated with many policy and program measures, among them, administrative revocation of licenses for drinking and driving and lower legal blood alcohol limits for youth and adults. Community programs involving multiple city departments and private citizens have reduced driving after drinking and traffic deaths and injuries. In addition, a combination of community mobilization, media advocacy, and enhanced law enforcement has been shown to reduce alcohol-related traffic crashes and sales of alcohol to minors. Alcohol consumption has also been linked with a substantial proportion of injuries and deaths from falls, fires, and drowning.

Smoke alarms reduce by half the risk of dying from a fire, while home sprinkler systems decrease the risk of death by 65 percent and property loss by 48 percent (10). As a result, operable residential smoke alarms can be highly effective in preventing fire-related deaths. It is important to understand that any smoke alarm will offer adequate warning for escape, provided that the alarm is listed by an independent testing laboratory and is properly installed and maintained. Fire safety initiatives targeted at the home and at increased smoke alarm use remain the key to any reductions in residential fire deaths. Five major strategies are: first, continued widespread public fire safety education is needed discussing fire prevention and how to avoid serious injury or death if fire occurs. Second, more people must use and maintain smoke alarms and develop and practice escape plans. Third, wider use of residential sprinklers must be aggressively pursued. Fourth, additional ways must be developed to make home products fire safe. Regulations requiring child-resistant lighters are a good example. The wider use of upholstered furniture and mattresses that are more resistant to cigarette ignitions are examples of changes that have already accomplished much. Fifth, the special fire safety needs of population groups at high risk, such as the young, older adults, and the disadvantaged need to be addressed (12,13).

Child-resistant packaging, product reformulation and interventions by poison control centers and health professionals all helped reduce the childhood poison-related death rate by 38 percent from 1987 to 1998 (14). Also, prescription drug interactions contribute to frailty and loss of visual acuity in the elderly and, consequently, to their high incidence of falls and resultant fractures. The death rate from falls among those 85 years and over is almost eight times the rate for those 65–84 years of age and has increased by almost 21 percent over the past decade.

Wearing a bicycle helmet reduces the risk of head injury by as much as 85 percent (15). Increases in usage may be possible with the introduction of multisport helmets and the help of the media to institutionalize the wearing of these helmets.

Transition to *Healthy People 2010*

Most of the topics covered in the *Healthy People 2000* priority areas on Unintentional Injuries (Priority Area 9) and Violent and Abusive Behavior (Priority Area 7) were reorganized into one Focus Area: Injury and Violence Prevention in *Healthy People 2010*. The rationale for combining these two focus areas was that many injuries produce the same outcome although they may result from different factors. For example, a nonfatal spinal cord injury produces the same outcome whether it is caused by an unintentional motor vehicle crash or an attempted suicide. Understanding injuries allows for development and implementation of effective prevention interventions. Some interventions can reduce injuries from both unintentional and violence-related episodes. For instance, efforts to promote proper storage of firearms in homes can help reduce the risk of assault with a firearm and intentional self-inflicted and unintentional firearm-related injuries in the home (16). Higher taxes on alcoholic beverages are associated with lower death rates from motor vehicle crashes and lower rates for some categories of violent crime, including rape (17,18).

Many injuries and injury-related deaths occur in some population groups (such as younger children from birth to age 4 years) where the intentionality of the injury is unknown and requires more detailed investigation. As these cases are examined, interventions can be developed to address ways injuries occur. An example of this, which is emerging as a growing public health concern, is poisonings in children.

Overall there are fewer objectives for the two subject areas. *Healthy People 2000* had 45 objectives in the Unintentional Injuries and Violence and Abusive Behaviors chapters compared with 39 objectives in the *Healthy People 2010* Injury and Violence Prevention chapter. For unintentional injuries *Healthy People 2000* had 29 objectives compared with 19 objectives in the *Healthy People 2010* edition. Violence had 19 objectives in *Healthy People 2000* compared with 8 objectives in *Healthy People 2010*. The *Healthy People 2010* chapter has a new section titled "Injury Prevention" containing 12 objectives that relate to both subject areas (for example, nonfatal head injuries and nonfatal spinal cord injuries, child fatality review, emergency department and hospital discharge surveillance systems).

The *Healthy People 2010* objective for deaths due to motor vehicle crashes, which was retained from *Healthy People 2000* (with a minor variation), has been designated as a measure of one of the Leading Health Indicators (LHI). Motor vehicle crashes are the most common cause of serious injury and so provide an indication of overall serious injury rates. The LHIs are discussed in further detail in the Introduction.

Some of the objectives contained in the unintended injury priority area of *Healthy People 2000* have been transferred to more specific focus areas in *Healthy People 2010*. These are listed as related objectives in *Healthy People 2010*.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Objective **9.2** (nonfatal unintentional injuries) is tracked with data from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). The ICD–9 codes designated for this objective include both unintentional and intentional injuries (see Appendix table V). The two types of injuries cannot be distinguished at the national level because currently only 22 States mandate the use of E-codes (external causes) on hospital discharge forms. NCHS is working with States to increase the use of E-codes.

Data for objective **9.6** (residential fire deaths) include all fire-related deaths. While 90 percent occur at home, a small proportion occur elsewhere. The 1990 baseline data for fire-related deaths for Puerto Ricans (**9.6g**) have been revised. The original baseline published in the *Midcourse Review and 1995 Revisions* (19) included data for 45 States and the District of Columbia. It did not include data for New York City where about 40 percent of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States (including New York) and the District of Columbia, is considerably lower than originally published and, in fact, has met the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on birth and death certificates has varied from year to year; see the Appendix for more information.

Objective **9.7** (hip fractures among older adults) is also monitored with data from the NHDS. These rates are based on extremely small numbers and must be interpreted cautiously. Data on race are not reported by many hospitals because of omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB–82 and UB–92). A comparison of NHDS data with the National Health Interview Survey (NHIS) data for people who reported being hospitalized (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites was roughly 22 percent in 1991; the difference for blacks was negligible (20).

Objective **9.11** refers to secondary conditions, which occur as a result of a spinal cord injury and include a pathology, an impairment, a functional limitation, or a disability.

Objectives **9.14** (safety belt and motorcycle helmet laws), **9.15** (handgun design laws), **9.22** (trauma linking systems), **9.24** (bicycle helmet laws), **9.25** (handgun storage laws), and **9.26** (graduated driver licensing) all relate to State laws or programs that vary across States in populations targeted, penalties, and liability.

The baseline and target for objective **9.17** (smoke detectors) are based on estimates of the proportion of homes with working smoke detectors; this is somewhat different from the intent of the objective, which focuses on working smoke detectors on each habitable floor. Findings from a 1993 survey conducted by the Consumer Product Safety Commission (CPSC) indicate that 52 percent of households had at least one functional smoke detector on each floor (21). Data from the 1993 NHIS did not specify a working smoke detector. The 1994 and 1998 supplemental data on the proportion of homes with working smoke detectors are from the NHIS, a different source than that used for the baseline.

Data Sources

Data for objective **9.3** (motor vehicle crash deaths) and the subobjectives (except **d** and **g**) are crude rates from the Department of Transportation's Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System) (FARS). See the Appendix for a discussion of crude and age-adjusted rates and the chapter on Priority Area 4 for a description of FARS. The rates for **9.3d** (American Indian/Alaska Native) and **9.3g** (Mexican American) are age-adjusted data from the National Vital Statistics System.

Baseline data for objective **9.21** (injury prevention counseling) are from the Primary Care Provider Surveys (PCPS). The sample for the survey was drawn from the membership rolls of professional associations of internists, family physicians, nurse practitioners, pediatricians, and obstetricians/gynecologists. Response rates from these groups varied from 50–80 percent. The data on inquiry about seat-belt use and falls in the home represent the proportion of practitioners who routinely queried 81–100 percent of their patients about these risks. The data on counseling about these issues represent the proportion of providers who routinely provided these services to their patients who needed the services. The basis for counseling may be independent of the inquiry made by the clinicians.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Alcohol-related motor vehicle crashes (**9.23**) are tracked using data from FARS. The FARS supplements death certificate data with information on the circumstances of the death to determine whether the death was alcohol related. The National Vital Statistics System does not specify alcohol-related motor vehicle crashes.

Data Comparability

Data for **9.8** (nonfatal poisonings) are from the National Electronic Injury Surveillance System (NEISS), which is maintained by the CPSC. This system does not utilize ICD–9 or other conventional injury coding mechanisms. Injuries reported in the system are limited to those related to products regulated by CPSC in a given year. Therefore, variation in the numbers and types of products affect the number of injuries reported in the system. The baseline and estimates were again revised in 1997 to accommodate a new sampling design.

In 1992, data collection for objectives **9.12** (motor vehicle occupant protection systems) and **9.13** (helmet use by motorcyclists and bicyclists) was expanded from 19 metropolitan areas to all 50 States. The data collection methods (direct observation) were unchanged.

Proxy Data

Tracking data for **9.16** (fire suppression systems) are from the U.S. Fire Administration's National Fire Incident Reporting System (NFIRS) and indicate the proportion of fires in residential properties that have automatic suppression systems. Data on localities for this objective are not available.

Regarding objective **9.19** (protective sports equipment), use of protective equipment in college sports is required by the National Collegiate Athletic Association. The additional data are from the NHIS and represent the proportions of children playing baseball, softball, football, or soccer who use headgear or mouthguards.

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Table 9. Unintentional injuries objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	9.1	**Unintentional injury deaths** (age adjusted per 100,000)	1987	34.7	32.5	31.0	29.4	30.3	30.3	30.5	30.4	30.1	30.1	---	29.3
		a. American Indian/Alaska Native	1987	66.0	59.0	58.3	57.3	58.1	58.3	56.7	57.6	58.5	55.6	---	53.0
		b. Black male	1987	§68.0	62.4	61.0	56.7	59.8	58.5	57.6	55.7	54.2	54.4	---	51.9
		c. White male	1987	§49.8	46.4	43.9	41.9	42.7	42.7	43.0	42.4	42.0	42.2	---	42.9
		d. Mexican American male[1]	1990	§53.1	...	47.2	46.5	48.6	46.1	44.6	45.4	43.0	44.2	---	43.0
■	9.2	**Unintentional injury hospitalizations** (per 100,000)[2]	1988	§832	780	764	714	699	654	635	612	582	564	---	754
		a. Black male	1991	1,007	...	...	969	893	847	911	730	637	628	---	856
☐	9.3	**Motor vehicle crash deaths**													
		Per 100 million vehicle miles traveled (VMT)	1987	2.4	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5
		Per 100,000 population	1987	19.2	17.9	16.5	15.4	15.6	15.6	15.9	15.9	15.7	15.4	15.3	14.2
		a. Children 14 years and under (per 100,000)	1987	6.3	5.3	5.1	4.8	4.9	5.1	4.9	4.8	4.6	4.4	4.2	4.4
		b. People 15–24 years (per 100,000)	1987	36.3	33.4	31.4	28.0	28.5	28.9	29.9	28.9	27.4	26.7	27.2	26.8
		c. People 70 years and over (per 100,000)	1987	22.9	22.9	22.3	21.9	22.9	23.4	23.3	23.3	23.9	23.3	22.4	20
		d. American Indian/Alaska Native (age adjusted per 100,000)	1987	37.7	33.2	33.4	32.0	32.3	31.4	33.1	34.0	32.3	31.8	---	32.0
		e. Motorcyclists (per 100 million VMT)	1987	§42.5	33.8	30.6	25.1	24.7	22.7	22.7	21.8	20.9	22.3	---	25.6
		(per 100,000)	1987	1.7	1.3	1.1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9
		f. Pedestrians (per 100,000)	1987	2.8	2.6	2.3	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.8	2.0
		g. Mexican American (age adjusted per 100,000)[1]	1990	20.9	...	18.9	17.5	18.1	18.7	17.7	18.0	17.0	16.7	---	18.0
☐	9.4	**Fall-related deaths** (age adjusted per 100,000)	1987	2.7	2.7	2.6	2.5	2.5	2.5	2.6	2.7	2.7	2.7	---	2.3
		a. People 65–84 years (per 100,000)	1987	18.1	17.8	18.0	17.6	17.8	18.3	18.5	19.9	20.7	21.5	---	14.4
		b. People 85 years and over (per 100,000)	1987	133.0	143.1	147.5	147.3	149.5	147.0	152.0	159.6	160.3	162.7	---	105.0
		c. Black male 30–69 years (per 100,000)	1987	8.1	6.8	6.2	5.3	5.5	5.4	4.8	5.3	4.5	4.9	---	5.6
		d. American Indian/Alaska Native (age adjusted per 100,000)	1990	3.2	...	3.1	3.1	4.3	3.2	3.8	2.9	4.0	3.5	---	2.8
☐	9.5	**Drowning deaths** (age adjusted per 100,000)	1987	2.1	1.9	1.9	1.6	1.7	1.5	1.7	1.5	1.5	1.6	---	1.3
		a. Children 4 years and under (per 100,000)	1987	§4.3	3.4	3.6	3.2	3.2	2.8	3.7	2.8	2.7	2.9	---	2.3
		b. Male 15–34 years (per 100,000)	1987	4.5	4.0	4.1	3.4	3.6	3.1	4.6	3.0	3.2	3.4	---	2.5
		c. Black male (age adjusted per 100,000)	1987	6.6	5.0	5.8	4.1	4.3	4.0	4.1	3.9	3.5	4.4	---	3.6
		d. American Indian/Alaska Native (age adjusted per 100,000)	1990	4.3	...	3.8	4.0	4.3	4.3	3.5	3.3	3.8	3.0	---	2.0
■	9.6	**Residential fire deaths**													
		Fire-related deaths (age adjusted per 100,000)[3]	1987	§1.7	1.5	1.5	1.4	1.3	1.4	1.2	1.2	1.1	1.0	---	1.2
		a. Children 4 years and under (per 100,000)	1987	§4.5	3.5	3.8	3.4	3.6	3.5	2.6	2.4	2.1	1.6	---	3.3

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	9.7	**Hip fractures among adults 65 years and over** (per 100,000)	1988	714	776	814	757	841	815	818	934	879	863	---	607
		a. White female 85 years and over	1988	2,721	3,075	3,091	2,368	3,035	2,815	2,604	2,804	2,879	2,690	---	2,177
■	9.8	**Nonfatal poisoning** (per 100,000)	1986	[3]104	68	64	61	52	43	43	41	41	38	33	88
		a. Children 4 years and under (per 100,000)	1986	[3]664	705	638	626	597	518	499	470	460	450	418	520
■	9.9	**Nonfatal head injuries** (per 100,000)	1988	118	110	104	92	90	84	87	79	75	61	---	106
■	9.10	**Nonfatal spinal cord injuries** (per 100,000)	1988	5.3	4.4	6.4	3.6	4.7	3.9	4.6	4.8	4.8	4.5	---	5.0
		a. Male	1988	9.6	6.9	9.8	4.8	6.7	7.1	6.9	6.5	6.1	7.4	---	7.1
☐	9.11	**Incidence of secondary conditions associated with traumatic spinal cord injuries**	...	---	---	---	---	---	---	---	---	---	---	---	20% reduction
☐	9.12	**Motor vehicle occupant protection systems**	1988	42%	49%	59%	62%	66%	67%	68%	68%	69%	69%	67%	85%
		a. Children 4 years and under	1988	48%	50%	55%	---	60%	60%	---	61%	---	92%	---	70%
☐	9.13	**Helmet use by motorcyclists and bicyclists**													
		Motorcyclists	1988	60%	60%	62%	---	---	63%	---	64%	67%	67%	---	80%
		Bicyclists	1988	8%	---	18%	---	---	---	---	---	---	---	---	50%
☐	9.14	**Safety belt and helmet use laws**													
		Number of States with safety belt laws[4]	1989	33	36	41	44	45	48	49	49	49	49	---	50
		Number of States with motorcycle helmet use laws[5]	1989	22	23	24	24	25	25	25	25	22	22	21	50
☐	9.15	**Number of States with handgun design to protect children**	1989	0	0	---	---	---	---	---	---	---	---	---	50
☐	9.16	**Fire suppression sprinkler installation codes** (number of localities)	1989	700	---	---	---	---	---	---	---	---	---	---	2,000
		Proportion of residential fires with suppression equipment	...	---	[6]2.4%	2.5%	2.7%	2.6%	---	---	---	---	---	---	...
■	9.17	**Smoke detectors**													
		In inhabited residential dwellings	1985	81%	82%	---	---	80%	---	---	---	---	---	---	100%
		At least one on each habitable floor	...	---	---	---	---	52%	---	---	---	---	---	---	100%
		Proportion of people with at least one detector	...	---	[7]68.5%	---	---	87.6%	92.7%	---	---	---	---	---	...
		At least one on each floor	...	---	---	---	---	66%	87%	---	---	---	88%	---	...
▨	9.18	**Injury prevention instruction in required course**													
		Proportion of middle/junior and senior high schools	1994	66.2%	...	...	...	...	...	---	---	---	---	---	50%
☐	9.19*	**Protective equipment in sporting and recreation events**	...	---	---	---	---	---	---	---	---	---	---	---	100%

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	National Collegiate Athletic Association													
	Football	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	Hockey	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	Lacrosse	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	High school football	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	Amateur boxing	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	Amateur ice hockey	1988	Required	---	---	---	---	---	---	---	---	---	---	...
	Use of protective headgear and mouth guards among children who play sports													
	Baseball/softball													
	Headgear	...	---	---	35%	---	---	---	---	---	---	47%	---	...
	Mouth guard	...	---	---	7%	---	---	---	---	---	---	12%	---	...
	Football													
	Headgear	...	---	---	72%	---	---	---	---	---	---	77%	---	...
	Mouth guard	...	---	---	72%	---	---	---	---	---	---	76%	---	...
	Soccer													
	Headgear	...	---	---	4%	---	---	---	---	---	---	9%	---	...
	Mouth guard	...	---	---	7%	---	---	---	---	---	---	14%	---	...
☐	9.20 **Number of States with design standards for roadway safety**	...	---	---	---	---	---	---	---	---	---	---	---	50
☐	9.21 **Injury prevention counseling by primary care providers**	...	---	---	---	---	---	---	---	---	---	---	---	50%
	Percent of clinicians routinely providing service to 81–100% of patients													
	Inquiry about seat belt/child seat use													
	Pediatricians	1992	45%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Nurse practitioners	1992	29%	...	...	...	---	---	---	---	---	[8,10]39%	---	50%
	Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Internists	1992	11%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Family physicians	1992	16%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Inquiry about hazards for falls in the home (65 years and over)													
	Nurse practitioners	1992	15%	...	...	...	---	---	---	---	---	[8]14%	---	50%
	Internists	1992	10%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Family physicians	1992	7%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Advice about seat belt/child seat use													
	Pediatricians	1992	58%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Nurse practitioners	1992	32%	...	...	...	---	---	---	---	---	[8,11]30%	---	50%
	Obstetricians/gynecologists	1992	18%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Internists	1992	15%	...	...	...	---	---	---	---	---	[8,9]...	---	50%
	Family physicians	1992	29%	...	...	...	---	---	---	---	---	[8,9]...	---	50%

See footnotes and key at end of table.

Table 9. Unintentional injuries objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Advice about prevention of falls in the home (65 years and over)													
		Nurse practitioners	1992	17%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[8]18%	- - -	50%
		Internists	1992	17%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[8,9]- - -	- - -	50%
		Family physicians	1992	15%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[8,9]- - -	- - -	50%
■	9.22	**Number of States with linked emergency medical services and trauma systems**	1993	7	. . .	. . .	. . .	. . .	- - -	- - -	- - -	- - -	21	- - -	20
☐	9.23*	**Alcohol-related motor vehicle deaths** (per 100,000)	1987	9.8	8.9	7.9	7.0	6.8	6.4	6.6	6.5	6.1	5.9	5.8	5.5
		a. American Indian/Alaska Native male	1987	40.4	34.3	32.2	31.4	26.8	28.0	- - -	- - -	- - -	- - -	- - -	35.0
		b. People 15–24 years	1987	[§]20.9	18.6	17.2	14.2	13.7	13.0	12.8	12.9	11.7	11.7	11.5	12.5
☐	9.24	**Number of States with bicycle helmet laws**	1994	9	. . .	. . .	. . .	. . .	. . .	13	14	15	15	- - -	50
☐	9.25*	**Number of States with firearm storage laws**	1989	[§]1	1	5	8	11	13	15	15	15	15	18	50
☐	9.26	**Number of States with graduated licensing systems**	1993	[§]0	. . .	. . .	. . .	. . .	- - -	- - -	- - -	11	- - -	23	35

- - - Data not available.
. . . Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

[§] Baseline has been revised.
[1] Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.
[2] Data include intentional and unintentional injuries and injuries where the intent was not known.
[3] Includes all deaths due to fires and flames regardless of location.
[4] The District of Columbia, Puerto Rico, and other U.S. possessions also have a safety belt law.
[5] The District of Columbia and Puerto Rico also have a motorcycle helmet law.
[6] 1989 data.
[7] 1985 data.
[8] 1997–98 data.
[9] Response rate for this group was too low to produce reliable estimates.
[10] Data represent the proportion of nurse practitioners who inquired about child safety seat use only. Seventeen percent of the nurse practitioners inquired about seat belt use.
[11] Data represent the proportion of nurse practitioners who provided advice about child safety seat use only. Data on advice on seat-belt use were not available.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
9.1, 9.1a–d	National Vital Statistics System, CDC, NCHS.
9.2	National Hospital Discharge Survey, CDC, NCHS.
9.3, 9.3a–c, e, f	Fatality Analysis Reporting System, DOT, NHTSA.
9.3d, g	National Vital Statistics System, CDC, NCHS.
9.4, 9.4a–d	National Vital Statistics System, CDC, NCHS.
9.5, 9.5a–d	National Vital Statistics System, CDC, NCHS.
9.6, 9.6a–d, f, g	National Vital Statistics System, CDC, NCHS.
9.6e	National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.7, 9.7a	National Hospital Discharge Survey, CDC, NCHS.
9.8, 9.8a	National Electronic Injury Surveillance System, CPSC, Directorate for Epidemiology.

Objective number	*Data source*
9.9	National Hospital Discharge Survey, CDC, NCHS.
9.10, 9.10a	National Hospital Discharge Survey, CDC, NCHS.
9.12	Baseline and 1989–91 updates: 19 Cities Survey, DOT, NHTSA. 1992–97 updates: Population Weighted State Surveys, DOT, NHTSA. 1998–99 updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.12a	Baseline: 19 Cities Survey, DOT, NHTSA. 1992–93 updates: Population Weighted State Surveys, DOT, NHTSA. 1994–98 updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.13	Baseline: 19 Cities Survey, DOT, NHTSA. Updates: National Occupant Protection Use Survey , DOT, NHTSA.
9.14	DOT, NHTSA.
9.15	Telephone Survey on Handgun Laws, CDC, NCIPC.
9.16	Baseline (localities): Fire Suppression Sprinkler Codes, FEMA, U.S. Fire Administration. 1990–93 data: National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.17	Baseline and 1990–93 updates: Prevention Index, Rodale Press for inhabited residential dwellings. 1993 data: Smoke Detector Operability Survey, Consumer Product Safety Commission for inhabited residential dwellings on each habitable floor. Proportion of people with smoke detectors: National Health Interview Survey, CDC, NCHS. Proportion of people with one on each floor: National Health Interview Survey, CDC, NCHS.
9.18	School Health Policies and Programs Study, CDC, NCCDPHP.
9.19*	1988 baseline: CDC, NCPS; NIH, NIDR. 1991 data: National Health Interview Survey, CDC, NCHS.
9.21	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
9.22	CDC, NCIPC.
9.23*, 9.23b	Fatality Analysis Reporting System, DOT, NHTSA.
9.23a	Fatality Analysis Reporting System, DOT, NHTSA; National Vital Statistics System, CDC, NCHS.
9.24	National SAFEKIDS Campaign.
9.25*	Office of Planning, Evaluation and Legislation, CDC, NCIPC; National Conference of State Legislatures.
9.26	Insurance Institute for Highway Safety.

*Duplicate objective. See full text of objective following this table.

Unintentional Injuries Objectives

9.1: Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 people.

  9.1a: Reduce deaths among American Indians and Alaska Natives caused by unintentional injuries to no more than 53.0 per 100,000 people.

  9.1b: Reduce deaths among black males caused by unintentional injuries to no more than 51.9 per 100,000 people.

  9.1c: Reduce deaths among white males caused by unintentional injuries to no more than 42.9 per 100,000.

  9.1d: Reduce deaths among Mexican-American males caused by unintentional injuries to no more than 43.0 per 100,000.

9.2: Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000 people.

  9.2a: Reduce nonfatal unintentional injuries among black males so that hospitalizations for this condition are no more than 856 per 100,000 people.

9.3: Reduce deaths caused by motor vehicle crashes to no more than 1.5 per 100 million vehicle miles traveled and 14.2 per 100,000 people.

  9.3a: Reduce deaths among children aged 14 and younger caused by motor vehicle crashes to no more than 4.4 per 100,000.

  9.3b: Reduce deaths among youth aged 15–24 caused by motor vehicle crashes to no more than 26.8 per 100,000.

  9.3c: Reduce deaths among people aged 70 and older caused by motor vehicle crashes to no more than 20 per 100,000.

  9.3d: Reduce deaths among American Indians and Alaska Natives caused by motor vehicle crashes to no more than 32 per 100,000.

  9.3e: Reduce deaths among motorcyclists caused by motor vehicle crashes to no more than 25.6 per 100 million vehicle miles traveled and 0.9 per 100,000.

  9.3f: Reduce deaths among pedestrians caused by motor vehicle crashes to no more than 2.0 per 100,000.

  9.3g: Reduce deaths among Mexican-Americans caused by motor vehicle crashes to no more than 18 per 100,000.

9.4: Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people.

  9.4a: Reduce deaths among people aged 65–84 from falls and fall-related injuries to no more than 14.4 per 100,000.

  9.4b: Reduce deaths among people aged 85 and older from falls and fall-related injuries to no more than 105 per 100,000.

  9.4c: Reduce deaths among black men aged 30–69 from falls and fall-related injuries to no more than 5.6 per 100,000.

  9.4d: Reduce deaths among American Indians and Alaska Natives from falls and fall-related injuries to no more than 2.8 per 100,000.

9.5: Reduce drowning deaths to no more than 1.3 per 100,000 people.

  9.5a: Reduce drowning deaths among children aged 4 and younger to no more than 2.3 per 100,000.

  9.5b: Reduce drowning deaths among men aged 15–34 to no more than 2.5 per 100,000.

  9.5c: Reduce drowning deaths among black males to no more than 3.6 per 100,000.

  9.5d: Reduce drowning deaths among American Indians and Alaska Natives to no more than 2.0 per 100,000.

9.6: Reduce residential fire deaths to no more than 1.2 per 100,000 people.

  9.6a: Reduce residential fire deaths among children aged 4 and younger to no more than 3.3 per 100,000.

  9.6b: Reduce residential fire deaths among people aged 65 and older to no more than 3.3 per 100,000.

  9.6c: Reduce residential fire deaths among black males to no more than 4.3 per 100,000.

  9.6d: Reduce residential fire deaths among black females to no more than 2.6 per 100,000.

  9.6e: Reduce residential fire deaths from residential fires caused by smoking to no more than 8 percent.

  9.6f: Reduce residential fire deaths among American Indians and Alaska Natives to no more than 1.4 per 100,000.

  9.6g: Reduce residential fire deaths among Puerto Ricans to no more than 2.0 per 100,000.

9.7: Reduce hip fractures among people aged 65 and older so that hospitalizations for this condition are no more than 607 per 100,000 people.

  9.7a: Reduce hip fractures among white women aged 85 and older so that hospitalizations for this condition are no more than 2,177 per 100,000.

9.8: Reduce nonfatal poisoning to no more than 88 emergency department treatments per 100,000 people.

  9.8a: Reduce nonfatal poisoning among children aged 4 and younger to no more than 520 emergency department treatments per 100,000.

9.9: Reduce nonfatal head injuries so that hospitalizations for this condition are no more than 106 per 100,000 people.

9.10: Reduce nonfatal spinal cord injuries so that hospitalizations for this condition are no more than 5 per 100,000 people.

  9.10a: Reduce nonfatal spinal cord injuries among males so that hospitalizations for this condition are no more than 7.1 per 100,000.

9.11: Reduce by 20 percent the incidence of secondary conditions (i.e., pressure sores) associated with traumatic spinal cord injuries.

9.12: Increase use of safety belts and child safety seats to at least 85 percent of motor vehicle occupants.

9.12a: Increase use of child restraint systems among children aged 4 and younger involved in potentially fatal crashes to 70 percent.

9.13: Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists.

9.14: Extend to 50 States laws requiring safety belt and motorcycle helmet use for all ages.

9.15: Enact in 50 States laws requiring that new handguns be designed to minimize the likelihood of discharge by children.

9.16: Extend to 2,000 local jurisdictions the number whose codes address the installation of fire suppression sprinkler systems in those residences at highest risk for fires.

9.17: Increase the presence of functional smoke detectors to at least one on each habitable floor of all inhabited residential dwellings.

9.18: Provide academic instruction on injury prevention and control, preferably as part of comprehensive school health education, in at least 50 percent of public school systems (grades K–12).

9.19*: Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.

Duplicate objective: 13.16

9.20: Increase to at least 50 the number of States that have design standards for markings, signing, and other characteristics of the roadway environment to improve the visual stimuli and protect the safety of older drivers and pedestrians.

9.21: Increase to at least 50 percent the proportion of primary care providers who routinely provide age-appropriate counseling on safety precautions to prevent unintentional injury.

9.22: Extend to 20 States the capability to link emergency medical services, trauma systems, and hospital data.

9.23*: Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 4.1

9.23a*: Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 4.1a

9.23b*: Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 4.1b

9.24: Extend to 50 States laws requiring helmets for bicycle riders.

9.25*: Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 7.19

9.26: Increase to 35 the number of States having a graduated driver licensing system for novice drivers and riders under the age of 18.

*Duplicate objective.

Priority Area 10 Occupational Safety and Health

Background

Workplace injuries and illness continue to place an enormous burden on the Nation's workers and economy. Each day, an average of 137 persons die from work-related illness (1,2) and an additional 17 die from work-related injuries (3). Each year, about 70 adolescent workers 17 years of age and under die from work-related injuries (4). In 1992, the estimated economic burden for occupational illnesses and injuries was $171 billion (5), while in 1998, the estimated societal cost of occupational injuries alone was $125.1 billion (6).

In 1999, highway crashes continued to be the leading cause of occupational death, accounting for 25 percent of work-related fatalities (3). During the same year and for the first time in the decade, an increase in falls and a simultaneous decline in homicides resulted in falls becoming the second and homicides the third leading cause of death in the workplace (3). The highest occupational fatality rates are observed in mining, agriculture, forestry and fishing, and construction (3).

Data Summary

Highlights

Since the development of *Healthy People 2000*, the Nation has experienced marked success in meeting the targets in several areas of occupational safety and health. The rate of work-related homicides per 100,000 workers (**10.16**) met its target level of 0.5 in 1998. The number of workers who became infected with hepatitis B virus through occupational exposure (**10.5**) was reduced to 243 cases in 1999, well beyond the target level of 623 cases. Both the percent of worksites with safety and health programs (**10.12**) and the percent of worksites with back injury prevention and rehabilitation programs (**10.13**) exceeded their target by 1999. In addition, the age-adjusted fatality rate for occupational lung disease per million workers 15 years of age and older (**10.17**) was reduced to 6.6 in 1998, beyond the target rate of 7.7.

Occupational lung disease exposure standards (**10.11**) are applicable in all 50 States and the District of Columbia, the target level, up from 15 in 1970. The number of States with programs for small business safety and health (**10.14**) also increased to the target level of 50 States and the District of Columbia.

In other areas, progress toward the *Healthy People 2000* targets was made. The rate of work-related injury deaths per 100,000 workers (**10.1**) decreased to 4.5 in 1999 from the 1983–87 baseline average rate of 6, the rate of nonfatal work-related injuries per 100,000 workers (**10.2**) was 6.2 in 1998, down from 7.7 in 1983–87, and the percent of businesses that ban smoking (**10.18**) increased from 27 percent in 1985 to 79 percent in 1999. The target for this objective (**10.18**) was raised from 75 percent to 100 percent at the midcourse review.

Moving substantially in the other direction, that is, away from their targets, were cumulative trauma disorders (**10.3**), worksite occupant protection systems (**10.6**), occupational noise exposure (**10.7**), and occupational lead exposure (**10.8**). For objective **10.8** the number of States reporting has increased over the last decade, which makes the raw number of cases reported understate the progress made; the rate of cases per million population has steadily decreased since 1995.

Summary of progress

Of the 20 occupational safety and health objectives, 7 (**10.5**, **10.11–10.14**, **10.16**, and **10.17**) have achieved their targets. Seven objectives (**10.1**, **10.2**, **10.4**, **10.9**, **10.10**, **10.15**, and **10.18**) moved toward the year 2000 targets. Progress for objective **10.15** was toward the year 2000 target, but is based on limited data from nurse practitioners only (see Data Issues). Four objectives (**10.3**, and **10.6–10.8**) moved away from the targets. Progress for the compound objective (**10.19**) was mixed. One objective (**10.20**) showed no change from the baseline level. See table 10 for the tracking data for the objectives in this priority area and figure 10 for a quantitative assessment of progress.

Discussion

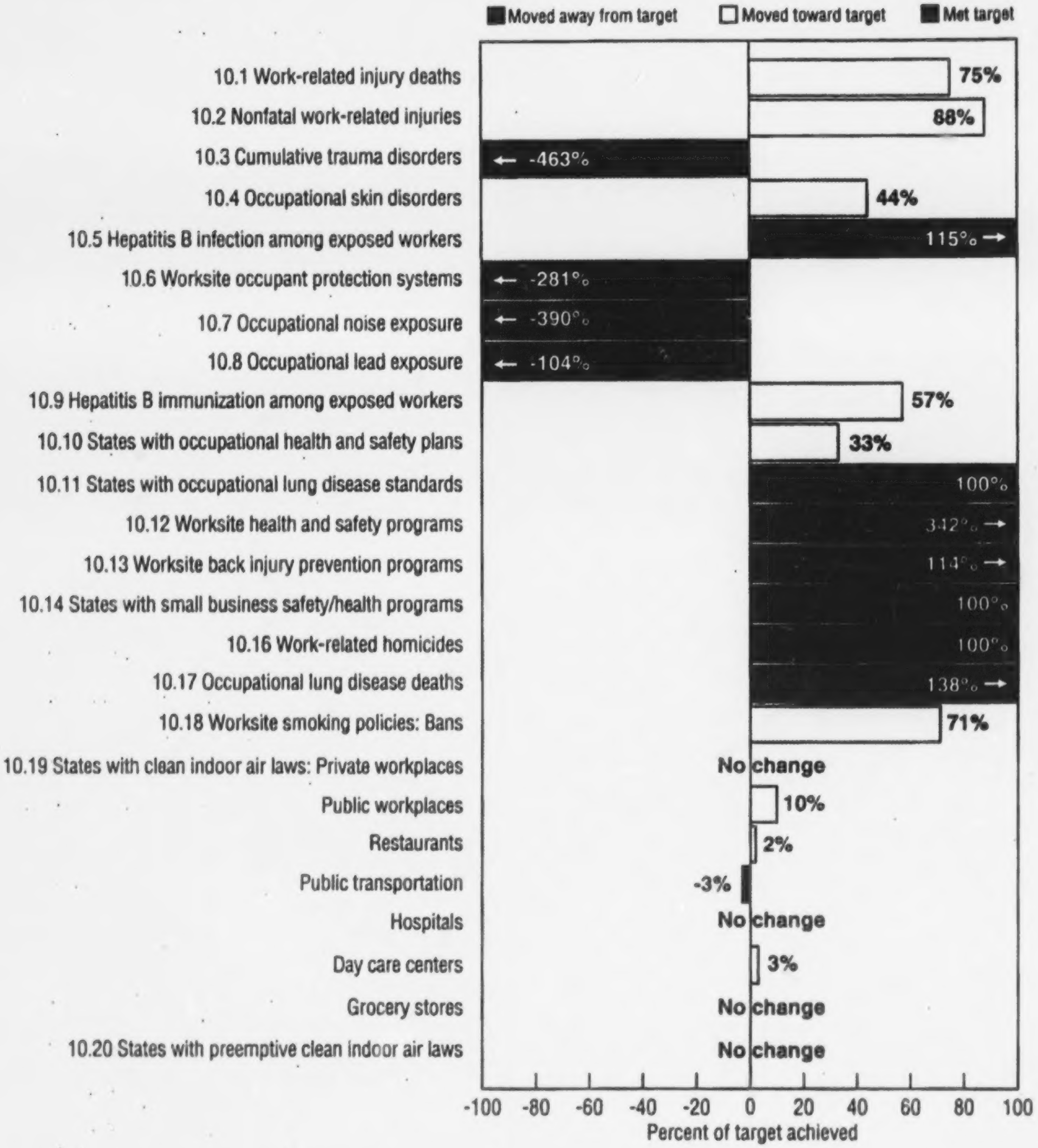
The barriers to achieving the *Healthy People 2000* objectives vary; however, there are a number of common themes. Numerous conditions—including hepatitis B, occupational lead exposure, and occupational injuries—are preventable, but the lack of public awareness of prevention measures or the view that these conditions are an "acceptable risk" of employment interfere with basic prevention. Gaps in scientific knowledge also present a barrier to achieving the objectives. For instance, in the case of cumulative trauma and other musculoskeletal disorders, limitations in the amount of technological and scientific information inhibit precise assessment of risks in some jobs with complex and multiple exposures to several risk factors. Difficulties in systematically evaluating the effectiveness of interventions also impeded progress toward the *Healthy People 2000* targets.

In addition, there is a lack of cost-benefit studies in occupational safety and health that would help motivate companies to institute and maintain occupational safety and health programs, such as back injury and hearing loss prevention programs. Moreover, difficulties in diagnosing and establishing the work relatedness of some conditions, such as occupational skin disorders/diseases and low back injuries, also serve as a barrier to progress.

The national occupational safety and health community is pursuing a number of strategies to address these and other barriers. Such efforts include health education and communication campaigns, academic training, research on intervention effectiveness and health services, and surveillance strategic planning. In addition, the National Institute for Occupational Safety and Health (NIOSH) is working with partners to track occupational injury and illness disparities among population subgroups. In all of these areas, partnerships among industry, labor, government, academia, and professional organizations are enhancing the Nation's ability to target resources and expertise.

Also addressing the barriers to achieving the *Healthy People 2000* objectives is the National Occupational Research Agenda (NORA), a framework to guide occupational safety and health research into the 21st century. Approximately 500 organizations and individuals provided input into the development of the agenda. The NORA process resulted in a consensus about a

Figure 10. Final status of Occupational Safety and Health objectives



NOTE: Complete tracking data are shown in table 10. Progress quotients are not calculated for objective 10.15.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

set of top 21 research priorities. The priority areas are organized under the more general categories of Disease and Injury, Work Environment and Workforce, and Research Tools and Approaches. Because of the significant overlap between the NORA research priority areas and the *Healthy People 2000* objectives, NORA was instrumental in moving the Nation toward the year 2000 targets and will likewise serve as a catalyst for advancing the objectives established in *Healthy People 2010* (7) over the next decade.

Transition to *Healthy People 2010*

Many of the *Healthy People 2000* occupational safety and health objectives are included in the new set of objectives for *Healthy People 2010*, with baselines and targets adjusted to reflect gains made, as well as changes in data systems. Several new objectives have been added to address work organization issues, health care worker hazards, and engineering interventions in agriculture. In addition, several *Healthy People 2000* objectives that cannot be tracked reliably or that have low relative value for monitoring improved outcomes in worker safety and health have been revised, replaced, or dropped from the *Healthy People 2010* objectives.

Objectives on work-related injury deaths and work-related injuries are continued in *Healthy People 2010* and are addressed by the NORA priority area of Traumatic Injuries. Also, the objective on overexertion or repetitive motion which is addressed by NORA's Low Back Disorders and Musculoskeletal Disorders of the Upper Extremities and the objective on occupational skin diseases or disorders, addressed by NORA's Allergic and Irritant Dermatitis, are included in the next decade. A number of other health outcomes are continued in *Healthy People 2010* including: work-related noise-induced hearing loss, addressed by NORA's Hearing Loss; elevated blood lead levels from work exposure, addressed by NORA's Fertility and Pregnancy Abnormalities; work-related homicides and work-related assaults, addressed by NORA's Traumatic Injuries; and, pneumoconiosis deaths, addressed by NORA's Asthma and Chronic Obstructive Pulmonary Diseases. Finally, two *Healthy People 2010* objectives are new: worksite stress reduction programs, addressed by NORA's Organization of Work; and needlestick injuries, addressed by NORA's Infectious Diseases.

Seven of the *Healthy People 2000* objectives were not included in *Healthy People 2010*: worksite occupant protection system mandates; State occupational safety and health plans; occupational lung disease exposure standards; worksite safety and health programs; worksite injury prevention and rehabilitation programs; State programs for small business safety and health; and clinician assessment of occupational health exposures.

Healthy People 2000 objectives on hepatitis B infections and hepatitis B immunizations are addressed by *Healthy People 2010* objectives in the Immunization and Infectious Diseases chapter. In addition, *Healthy People 2000* objectives on worksites with smoking policies, States with comprehensive laws for clean indoor air, and preemptive clean indoor air laws are addressed by *Healthy People 2010* objectives in the Tobacco Use chapter.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Objective **10.20** seeks to reduce the number of States with preemptive clean indoor air laws. Preemptive laws prevent local jurisdictions from enacting more stringent restrictions than the State law or restrictions that vary from the State law (8).

Data Sources

Since 1992, the data for objective **10.1** (work-related injury deaths) have come from the Census for Fatal Occupational Injuries (CFOI), Bureau of Labor Statistics (BLS). Prior to 1992, the data came from the Annual Survey on Occupational Injuries and Illnesses (ASOII). ASOII relied on a single data source to capture occupational fatalities: a survey of employer logs of occupational deaths in approximately 50,000 workplaces. The survey undercounted occupational fatalities by as much as 60 percent (9). The CFOI uses a minimum of two data sources to identify occupational deaths. The primary sources are death certificates; State workers' compensation reports; coroner, medical examiner, or autopsy reports; and Occupational Safety and Health Administration (OSHA) reports. The rates for 1993 were rounded to whole numbers by BLS. National Traumatic Occupational Fatalities Surveillance System (NTOF) data (reported by NIOSH) can also be used to monitor this objective, but NTOF uses only death certificates and may underestimate some categories of work-related injury deaths. CFOI and NTOF are also used to track objective **10.16** on workplace homicides.

The subobjective on adolescent work injuries (**10.2f**) is tracked with data from the National Electronic Injury Surveillance System (NEISS) under an interagency agreement between NIOSH and the Consumer Product Safety Commission (CPSC) and does not utilize ICD–9 codes or other conventional injury reporting mechanisms. The data are collected in hospital emergency rooms and are limited to injuries attributable to a specific list of regulated products and devices. Hence, the data collected are subject to annual variations in what is specified in product safety or regulatory codes. The baseline for adolescent worker injuries is an extrapolation of data from the last 6 months of calendar year 1992 and is limited to workers ages 15–17 years. The updates for 1996 and 1997 are for fiscal years; the 1998 data are for the calendar year. The main objective and the other subobjectives for **10.2** are tracked using data from ASOII.

The data used to report on the status of objective **10.7** (occupational noise exposure) come from the U.S. Air Force Hearing Conservation Database. The data report exposures for civilian and military employees in a wide range of industrial and service occupations. NIOSH is currently developing the Sentinel Event Notification System for Occupational Risk (SENSOR) and the Occupational Hearing and Conservation database and has issued guidelines and sponsored workshops designed to address this important occupational health issue.

The data for objective **10.8** (occupational lead exposure) are from

State registries that report adult blood lead levels. These State data are compiled by NIOSH in the Adult Blood Lead Epidemiology Survey (ABLES). The number of reporting States has increased since the baseline was established; this increase has affected the number of cases reported; in fiscal year 1999, 25 States were reporting.

Objective **10.11** (State exposure standards for occupational lung disease) was achieved because Federal standards applicable in all 50 States and the District of Columbia were established for airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. The parallel objective **10.17** (pneumoconiosis deaths) is tracked with the number of deaths as reported in the National Vital Statistics System (NVSS).

The 1985, 1987, and 1992 data for objectives **10.12** (worksite safety and health programs), **10.13** (worksite back injury prevention), and **10.18** (worksite smoking policies) are from the National Surveys of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites of 50 or more employees. Worksites were sampled instead of companies, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 updates were measured by the Centers for Disease Control and Prevention (CDC)-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (10,11). The 1998–99 data for **10.13** and **10.18** also came from the National Worksite Health Promotion Survey. Like the 1992 survey, the designated respondent was asked if the worksite had specific policies or prevention activities (12).

Baseline data for objective **10.15** (screening for occupational health exposure) are from the Primary Care Provider Surveys (PCPS). The PCPS sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on inquiry about work-related risks represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

The baseline data for objective **10.9** (hepatitis immunizations) were collected by OSHA's Regulatory Impact Analysis; the updates are from CDC's National Center for Infectious Diseases. The baseline for objective **10.10** (State occupational health and safety plans) came from the Public Health Foundation's unintentional injuries survey; the updates are from OSHA. For both objectives, the data may not be comparable and statements about trends must be made with caution. It should also be noted that all updates for objective **10.16** are from the Bureau of Labor Statistics' CFOI and the baseline data were from NIOSH.

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Table 10. Occupational Safety and Health objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	10.1 **Work-related injury deaths** (per 100,000 workers)	1983–87	6.0	4.3	4.3	5.0	5.0	5.0	4.9	4.8	4.8	4.5	4.5	4.0
	a. Mine workers	1983–87	30.3	[1]17.3	15.6	27.0	26.0	27.0	25.0	26.8	25	23.6	21.5	21
	b. Construction workers	1983–87	25.0	20.6	16.6	14.0	14.0	15.0	14.6	13.9	14.1	14.6	14.0	17
	c. Transportation workers	1983–87	15.2	10.0	8.1	13.0	13.0	14	13.1	13.1	13.2	11.8	12.6	10
	d. Farm workers	1983–87	14.0	23.8	---	24.0	26.0	24	22.5	22.8	23.9	24.1	23.6	9.5
☐	10.2 **Nonfatal work-related injuries** (per 100 full-time workers[2]	1983–87	7.7	8.3	7.9	8.3	7.9	7.7	7.5	6.9	6.6	6.2	---	6
	a. Construction workers[2]	1983–87	14.9	14.1	12.8	12.9	12.0	11.5	10.4	9.7	9.3	8.7	---	10
	b. Nursing and personal care workers[2]	1983–87	12.7	15.4	15.0	18.2	16.9	16.5	17.8	16.2	15.9	13.8	---	9
	c. Farm workers[2]	1983–87	12.4	12.3	11.1	11.5	10.9	9.7	9.9	8.9	8.7	8.0	---	8
	d. Transportation workers[2]	1983–87	8.3	9.4	9.1	8.8	9.1	9.0	8.7	8.4	7.9	7.0	---	6
	e. Mine workers[2]	1983–87	8.3	8.1	7.1	7.0	6.5	6.0	6.0	5.3	5.7	4.7	---	6
	f. Adolescent workers (15–17 years)[3]	1992	5.8	...	...	...	---	---	---	4.8	4.8	[4]4.9	---	3.8
▨	10.3 **Cumulative trauma disorders** (per 100,000 full-time workers)	1987	100	241	297	368	383	411	378	335	320	285	---	60
	a. Manufacturing industry workers	1987	355	867	1,046	1,241	1,267	1,362	1,258	1,104	1,061	960	---	150
	b. Meat product workers	1987	3,920	8,245	8,802	8,475	8,532	8,750	7,720	6,116	6,860	5,979	---	2,000
☐	10.4 **Occupational skin disorders** (per 100,000 full-time workers)	1983–87	64	79	77	82	76	81	79	69	67	60	---	55
■	10.5* **Hepatitis B infections among occupationally exposed workers** (number of cases)	1987	3,090	1,258	2,576	1,923	727	506	407	391	383	377	243	623
■	10.6 **Worksite occupant protection system mandates**	1992	82.4%	...	...	...	---	---	85%	---	---	---	[5]47%	95%
■	10.7 **Occupational noise exposure**[6] (average noise levels exceeding 85 db)	1989	16%	20.5%	23.8%	21.5%	19.9%	---	---	---	---	---	---	15%
■	10.8 **Occupational lead exposure** (blood concentration greater than 25 μg/dL)	1988	[7]4,804	[8]4,531	---	[9]8,886	[10]9,571	[11]11,068	[11]11,660	[12]12,706	[13]12,688	[14]10,501	[14]9,790	0
☐	10.9* **Hepatitis B immunizations among occupationally exposed workers**[15]	1989	37%	---	---	50%	---	67%	---	---	---	---	---	90%
☐	10.10 **Number of States with occupational health and safety plans**[16]	1989	10	---	---	23	---	---	---	---	---	---	23	51
■	10.11 **Number of States with occupational lung disease exposure standards**[16]	1970	[17]51	51	51	51	51	51	51	51	51	51	51	51
■	10.12 **Worksite health and safety programs**	1992	63.8%	...	...	...	---	---	85%	---	---	---	---	70%
■	10.13 **Worksite back injury prevention and rehabilitation programs**	1985	28.6%	---	---	32.5%	---	---	---	---	---	---	[5]53%	50%
	Back injury classes, workshops or lectures	...	---	...	...	24%	---	---	26%	---	---	---	---	...
■	10.14 **Number of States with programs for small business safety and health**[16]	1991	26	...	...	---	51	51	51	51	51	51	---	51
☐	10.15 **Clinician assessment of occupational health exposures**	...	---	---	---	---	---	---	---	---	---	---	---	75%

See footnotes and key at end of table.

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Table 10. Occupational Safety and Health objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Percent of clinicians routinely providing service to 81–100% of patients													
		Inquiry about work-related health risks (16 years and over)													
		Pediatricians	1992	7%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Nurse practitioners	1992	14%	...	...	...	---	---	---	---	---	[18]14%	---	75%
		Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Internists	1992	14%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Family physicians	1992	7%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Counseling about work-related health risks													
		Pediatricians	1992	8%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Nurse practitioners	1992	10%	...	...	...	---	---	---	---	---	[18]12%	---	75%
		Obstetricians/gynecologists	1992	10%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Internists	1992	9%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
		Family physicians	1992	8%	...	...	...	---	---	---	---	---	[18,19]---	---	75%
■	10.16	**Work-related homicides** (per 100,000 workers)	1980–89	0.7	---	---	0.9	0.8	0.9	0.8	0.7	0.6	0.5	0.5	0.5
■	10.17	**Occupational lung disease (pneumoconiosis) deaths among people 15 years and over** (age adjusted per million)	1990	[5]10.6	...	9.8	8.8	8.7	8.1	8.2	7.8	7.0	6.6	---	7.7
		Number of pneumoconiosis deaths among people 15 years and over	...	---	3,644	3,486	3,230	3,238	3,126	3,151	3,114	2,928	2,790	---	3,000
☐	10.18*	**Worksites with smoking policies**													
		Policy that bans smoking or limits it to separately ventilated areas 50 or more employees	1985	27%	---	---	59%	---	---	---	---	---	---	[5]79%	100%
		Any smoking policy													
		Medium and large companies	1987	54%	---	85%	---	---	---	---	---	---	---	---	100%
		50 or more employees	...	---	---	---	86%	---	---	87%	---	---	---	---	...
☐	10.19*	**Number of States with comprehensive laws for clean indoor air**[16]													
		Private workplaces	1995	[5]1	...	...	...	...	...	...	1	1	1	---	51
		Public workplaces	1995	[5]9	...	...	...	...	...	...	9	12	13	---	51
		Restaurants	1995	2	...	...	...	...	...	...	3	3	3	---	51
		Public transportation	1995	[5]17	...	...	...	...	...	...	17	17	16	---	51
		Hospitals	1995	[5]8	...	...	...	...	...	...	8	8	---	---	51
		Day care centers	1995	21	...	...	...	...	...	...	21	21	22	---	51
		Grocery stores	1995	[5]4	...	...	...	...	...	...	4	4	4	---	51
☐	10.20*	**Preemptive clean indoor air laws**													
		States with laws	1995	17	...	...	...	...	...	...	17	17	17	17	0

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[*] Baseline has been revised.
[1] 1989 data.
[2] Data include work-related injuries and illnesses.
[3] Data are for adolescents age 15–17 who sought medical treatment in an emergency room and are reported by fiscal year.
[4] Data are for the calendar year 1998.
[5] 1998–99 data.
[6] Data represent a cross-section of civilian and military employees.
[7] Data are from 7 States.
[8] Data are from 13 States.
[9] Data are from 18 States.
[10] Data are from 17 States.
[11] Data are from 22 States.
[12] Data are from 24 States.
[13] Data are from 27 States.
[14] Data are from 25 States.
[15] Health care workers only.
[16] Includes the District of Columbia.
[17] Pursuant to the enactment of the Federal Coal Mine Health and Safety Act of 1969 (PL91–173, amended by PL95–164) and the Occupational Safety and Health Act of 1970 (PL91 Federal Standards have been established for occupational exposure to airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. These exposure limits apply in all 50 St U.S. Territories.
[18] 1997–98 data.
[19] Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
10.1, 10.1a–d	Baseline and 1990–91 updates: Annual Survey of Occupational Injuries and Illnesses, DOL, BLS. 1992–99 updates: Census of Fatal Occupational Injuries, DOL, BLS.
10.2, 10.2a–e	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.2f	National Electronic Injury Surveillance System, CPSC.
10.3, 10.3a–b	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.4	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.5*	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Study of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
10.6	Baseline: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 Update: Business Responds to HIV/AIDS Benchmark S CDC, NCHSTP; 1998–99 Update: National Worksite Health Promotion Survey, OPHS, ODPHP.
10.7	U.S. Air Force Hearing Conservation Database, DoD.
10.8	Adult Elevated Blood Lead Level Registries, CDC, NIOSH.
10.9*	Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA. Updates: CDC, NCID.
10.10	Baseline: Association of State and Territorial Health Officials Reporting System: Unintentional Injuries Survey, PHF. Updates: DOL, OSHA.
10.11	CDC, NIOSH.
10.12	Baseline: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 Update: Business Responds to HIV/AIDS Benchmark Survey, CDC, NCHSTP.
10.13	Baseline and 1992 updates: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP; 1999 Update: National Worksite Health Promotion Survey, OPHS
10.14	CDC, NIOSH.
10.15	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.

Objective number	*Data source*
10.16	Baseline: National Traumatic Occupational Fatalities, CDC, NIOSH. Updates: Census of Fatal Occupational Injuries, DOL, BLS.
10.17	National Vital Statistics System, CDC, NCHS.
10.18*	Baseline, 1991 and 1992 updates for worksites with 50 or more employees: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. 1998–99 update: National Worksite Health Promotion Survey, OPHS, ODPHP. For medium and large companies: Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.
10.19*	Office of Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
10.20*	Office of Smoking and Health Legislative Tracking System, CDC, NCCDPHP.

*Duplicate objective. See full text of objective following this table.

Occupational Safety and Health Objectives

10.1: Reduce deaths from work-related injuries to no more than 4 per 100,000 full-time workers.

10.1a: Reduce deaths among mine workers from work-related injuries to no more than 21 per 100,000 full-time workers.

10.1b: Reduce deaths among construction workers from work-related injuries to no more than 17 per 100,000 full-time workers.

10.1c: Reduce deaths among transportation workers from work-related injuries to no more than 10 per 100,000 full-time workers.

10.1d: Reduce deaths among farm workers from work-related injuries to no more than 9.5 per 100,000 full-time workers.

10.2: Reduce work-related injuries resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

10.2a: Reduce work-related injuries among construction workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 10 cases per 100 full-time workers.

10.2b: Reduce work-related injuries among nursing and personal care workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 9 cases per 100 full-time workers.

10.2c: Reduce work-related injuries among farm workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 8 cases per 100 full-time workers.

10.2d: Reduce work-related injuries among transportation workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

10.2e: Reduce work-related injuries among mine workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

10.2f: Reduce work-related injuries among adolescent workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 3.8 cases per 100 full-time workers.

10.3: Reduce cumulative trauma disorders to an incidence of no more than 60 cases per 100,000 full-time workers.

10.3a: Reduce cumulative trauma disorders among manufacturing industry workers to an incidence of no more than 150 cases per 100,000 full-time workers.

10.3b: Reduce cumulative trauma disorders among meat product workers to an incidence of no more than 2,000 cases per 100,000 full-time workers.

10.4: Reduce occupational skin disorders or diseases to an incidence of no more than 55 per 100,000 full-time workers.

10.5*: Reduce hepatitis B infections among occupationally exposed workers to an incidence of no more than 623 cases.

Duplicate objective: 20.3e

10.6: Increase to at least 95 percent the proportion of worksites with 50 or more employees that mandate employee use of occupant protection systems, such as seat belts, during all work-related motor vehicle travel.

10.7: Reduce to no more than 15 percent the proportion of workers exposed to average daily noise levels that exceed 85 dBA.

10.8: Eliminate exposures which result in workers having blood lead concentrations greater than 25 ug/dL of whole blood.

10.9*: Increase hepatitis B immunization levels to 90 percent among occupationally exposed workers.

Duplicate objective: 20.11

10.10: Implement occupational safety and health plans in 50 States for the identification, management, and prevention of leading work-related diseases and injuries within the State.

10.11: Establish in 50 States exposure standards adequate to prevent the major occupational lung diseases to which their worker populations are exposed (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis).

10.12: Increase to at least 70 percent the proportion of worksites with 50 or more employees that have implemented programs on worker health and safety.

10.13: Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer back injury prevention and rehabilitation programs.

10.14: Establish in 50 States either public health or labor department programs that provide consultation and assistance to small businesses to implement safety and health programs for their employees.

10.15: Increase to at least 75 percent the proportion of primary care providers who routinely elicit occupational health exposures as a part of patient history and provide relevant counseling.

10.16: Reduce deaths from work-related homicides to no more than 0.5 per 100,000 full-time workers.

10.17: Reduce the overall age-adjusted mortality rate for four major preventable occupational lung diseases (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis) to 7.7 per 100,000.

10.18*: Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

Duplicate objective: 3.11

10.19*: Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.

Duplicate objective: 3.12

10.20*: Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.

Duplicate objective: 3.25

*Duplicate objective.

Priority Area 11 Environmental Health

Background

Environmental factors play a central role in human development, health, and disease. A mainstay of public health practice since the late 1800s (1), environmental protection addresses both the physical and social environments. The physical environment includes the air, water, and soil through which exposure to chemical, biological, and physical agents can occur. The social environment encompasses housing, transportation, urban development, land use, industry, and agriculture and results in exposures to conditions such as work-related stress, injury, and violence.

An estimated 25 percent of preventable illnesses worldwide can be attributed to poor environmental quality, with diarrheal diseases and respiratory infections heading the list (2).

Poor air quality contributes to respiratory illness, cardiovascular disease, and cancer. In the United States, air pollution alone is associated with about $40– $50 billion in health-related costs annually (3). Two indicators of air quality, both outdoor and indoor, are ozone and environmental tobacco smoke (ETS), respectively. In 1997, approximately 43 percent of the U.S. population lived in areas that failed to meet federally established health-based standards for ozone (3). From 1988 to 1994, 65 percent of nonsmokers were exposed to ETS. An estimated 125 million children were exposed to ETS in their homes in 1996 (3).

In 1995, 85 percent of persons served by community water systems received water that met Federal standards (3). Between 1987 and 1996, an average of 15.5 waterborne disease outbreaks per year occurred, of which 6 originated from community water systems that supplied drinking water (3).

Toxic substances and wastes pose a significant public health threat. Exposure to lead is evidenced by elevated blood lead levels in children. In the area of waste management, more than one-half of the U.S. population was served by curbside recycling by the end of the decade.

Increasingly, environmental quality is becoming a global concern. The potential for health risks to spread is heightened as ever-increasing numbers of people and products cross national borders. For example, pesticides that are not registered or that are restricted in the United States potentially could enter this country through imported fruits, vegetables, and seafood produced abroad, adding an additional burden to the U.S. public health system.

Data Summary

Highlights

Asthma hospitalizations (**11.1**) for the population as a whole declined over the decade, exceeding the year 2000 target in 1998. Although the rates for the nonwhite population, children 14 years of age and under, and women over 25 years of age also declined, they remained significantly higher than their year 2000 targets. Reducing the number of children with elevated blood lead levels (**11.4**) from 3 million to 393,000 was one of the most significant achievements in environmental health in the latter part of the 20th century. The final number of children, however, was short of the target of 300,000 set for the year 2000.

The number of waterborne outbreaks (**11.3**) declined through the decade and was less than the year 2000 target of 11 for each year between 1996 and 1998. The targets for increasing the number of curbside and household hazardous waste recycling programs (**11.5**) and the average amount of solid waste produced "after recovery" (**11.8**) were also met by the close of the decade, although the average amount of solid waste before recovery (**11.8**) increased above the set target limit. The proportion of children exposed to tobacco smoke at home (**11.7**) was reduced to below the target as well.

Progress in the proportion of rivers, lakes, and estuaries that met designated uses (**11.10**) was split with recreational activities moving toward or meeting year 2000 targets and consumable fish moving away from the targets in all cases.

The proportion of people who knew what radon was and had tested their homes for radon (**11.6**) increased in 1998 compared with previous years and was three times that reported in 1990. Only a fraction of these homes exceed the level identified as dangerous (four picocuries) by the U.S. Environmental Protection Agency. The proportion of homes in which smokers or former smokers lived that had been tested for radon increased in 1998. As of 1997, 28 States required disclosure of radon test results at the time of home sales (**11.13**). While this number represents a major increase over the 1989 baseline of one State, it falls short of the year 2000 target of 30 States.

The proportion of people living in counties that did not exceed ambient air standards for any of the six air pollutants (ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulates, and lead) (**11.5**) increased substantially and, measured individually, only fell short of the year 2000 target for ozone.

Summary of Progress

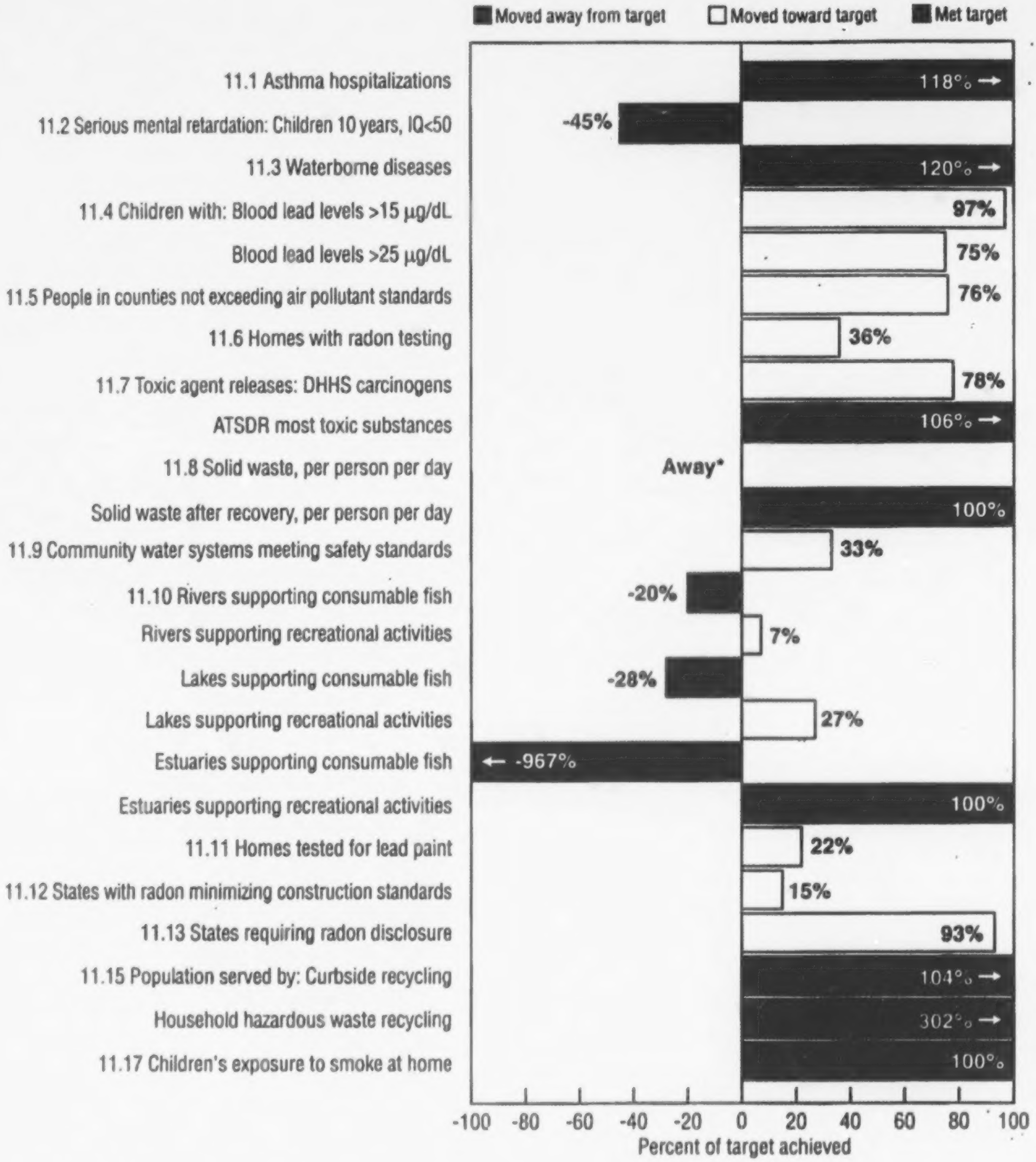
Of the 17 environmental health objectives, 4 (**11.1**, **11.3**, **11.15**, and **11.17**) met the year 2000 target and 9 showed progress toward the year 2000 targets (**11.4–11.7**, **11.9**, **11.11–11.13**, and **11.16**). Progress for objective **11.14** is difficult to evaluate (see Data Issues). One objective (**11.2**) moved away from its target. Progress for two objectives (**11.8** and **11.10**) was mixed. See table 11 for the tracking data for the objectives in this priority area and figure 11 for a quantitative assessment of progress.

Discussion

The decline in childhood lead poisoning in the United States represents a public health success. The dramatic reduction was a result of research to identify persons at risk, professional and public education campaigns to "spread the word," broad-based screening measures to find those at risk, and effective community efforts to clean up problem areas, namely, substandard housing units. However, despite the success achieved, more remains to be done before childhood lead poisoning becomes a disease of the past. Although childhood lead poisoning occurred in all population groups, the risk was higher for persons having low income, living in older housing, and belonging to certain racial and ethnic groups.

Urban sprawl has become an increasingly important concern in the United States for several reasons: increased outdoor air pollution in major urban areas, reduced quality of life due

Figure 11. Final status of Environmental Health objectives



*This objective has moved away from its target. A progress quotient could not be calculated.

NOTE: Complete tracking data are shown in table 11. Progress quotients are not calculated for objectives 11.14 and 11.16. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

to the loss of free time and the stress of increased commuting time, and less green space in major metropolitan areas. For example, between 1983 and 1995, the average annual vehicle miles traveled increased 80 percent (4). These conditions may lead to increases in asthma and other respiratory conditions, which often are triggered or worsened by substances found in the air. Although the public health community has focused several activities on asthma, it continues to be a significant burden. The direct economic and health care costs of asthma and other respiratory conditions were estimated to be $6.2 billion in 1990, projected to have risen to $14.5 billion by the year 2000. Indirect costs include an estimated 10 million schools days missed each year by children with asthma and $1 billion of lost productivity of their parents caring for them (5).

Although improvements in environmental public health are possible, complete success is often elusive. For instance, the waterborne disease objective (11.3) exceeded the target; however, infectious agents still contaminate drinking water. Animals continue to carry diseases to human populations, and outbreaks of once-common intestinal diseases (for example, typhoid fever), although less frequent, still occur. These outbreaks underscore the need to maintain and improve programs developed in the first half of the 20th century to ensure the safety of food and water. The challenge is to retain these basic capacities in the 21st century, with the added responsibilities for dealing with emerging hazards. The control of well-known hazards must coexist with ongoing research and the development of strategies and methods to understand and control new hazards.

An increase in public awareness of environmental health issues is key to public health advances. Education—at all levels—is a cornerstone of broad prevention efforts. Improving the availability of environmental health data will impact on continued improvement for the environmental health objectives. Surveillance systems play a crucial role to track and understand exposures. Substantial improvement has occurred in the establishment of State-based surveillance systems, especially for childhood, and to a lesser extent adult, lead poisoning.

Transition to *Healthy People 2010*

The 1990s saw extensive expansion and increased visibility of environmental health-related issues in both the scientific and public arenas. The heightened concern over environmental health issues had the effect of broadening the field. As a result, the number and breadth of the *Healthy People 2010* Environmental Health objectives increased.

Because of the expansion of the field, an effort was made to convene a more comprehensive working group to develop the plan for the focus area. In addition to the agencies serving as co-leads for the focus area, members were recruited from other Federal agencies, national organizations, and professional associations with areas of expertise relevant to environmental health. The expansion of the field was further supported by the extensive input received during the public comment period regarding the subject matter of environmental health.

Healthy People 2010 builds on the experience gained from *Healthy People 2000* by presenting objectives that address developments and shortcomings encountered during the decade. For example, for clean air standards, *Healthy People 2010* contains an objective that takes into consideration Federal standards and additional programs as well as a series of objectives that call for the elimination of unclean air in cities. Also, because a system to accurately and effectively measure the cleanup of hazardous waste sites was not developed, the *Healthy People 2010* objective has been substantially changed, incorporating other types of contaminated sites.

Although substantially expanded, the *Healthy People 2010* objectives retained three *Healthy People 2000* objectives and retained the substance of six others. Because of the significant expansion decided on by the environmental health work group and to facilitate management, the new chapter is divided into six sections:

- Outdoor Air Quality
- Water Quality
- Toxics and Waste
- Healthy Homes and Healthy Communities
- Infrastructure and Surveillance
- Global Environmental Health

Some proposed objectives and topics were eliminated from the set of final objectives because of the expanse of the environmental health field. In addition, a number of objectives and topics such as food, noise, and respiratory-related environmental factors were subsumed into other focus areas (Food Safety, Occupational Safety and Health, and Respiratory Diseases) to avoid duplication of objectives.

The objective addressing exposure to air that does not meet EPA's standard for ozone was retained from *Healthy People 2000* (with some variation) and has been designated as a measure of one of the *Healthy People 2010* Leading Health Indicators (LHIs). Under the objective, a high standard of improvement has been set for ozone because ozone levels require the most improvement of the outdoor air pollutants. The LHIs are discussed in further detail in the Introduction.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Data for objective **11.1** (asthma hospitalizations) come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race (required for objective **11.1a** asthma hospitalizations for blacks and nonwhites) are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB–82 and UB–92). A comparison of NHDS data with National Health Interview Survey (NHIS) data for people who reported being hospitalized indicated that underreporting for whites was roughly 22 percent in 1991; the difference in reporting for blacks was negligible (6). (NHIS data were adjusted to exclude hospitalizations of 1 day or less.)

The baseline data for **11.2** (mental retardation) were revised to be comparable with data from the Metropolitan Atlanta Developmental Disabilities Surveillance Program, which uses school counts of children classified as mentally retarded.

Data for **11.3** are from the CDC's Waterborne Surveillance System, which compiles data from States; reporting is voluntary. Only water intended for drinking is included. Variations in the level of reporting can produce large fluctuations in the number of outbreaks reported from year to year. An outbreak can be defined when as few as two people are affected by waterborne disease or poisoning; however, the numbers of people affected by the one outbreak in 1994 (the year the target was met) were as high as 400,000 people. Epidemiological evidence is used to link the cause of the outbreak to water.

The updates for **11.4** are from the National Health and Nutrition Examination Survey (NHANES) III (1988–94). The children tested in NHANES III were 1–5 years of age compared with 6 months–5 years of age for the 1984 baseline projected from NHANES II (1976–80) data. Additionally, the special population was identified using the Bureau of Census Poverty Income Ratio rather than a discrete family income level. It should be noted that the 1988–94 update data surpassed the original year 2000 target for this objective. The current, more ambitious, target set at the midcourse review was not attained.

Data for **11.5** (air quality) are affected by a range of meteorological factors (for example, temperature and wind) and may vary considerably on an annual basis. The data are also limited by the fact that not all counties have monitoring stations. Individual exposure within counties varies greatly and health effects from poor air quality are mitigated by a wide range of individual factors (for example, personal sensitivity to pollutants, other health conditions, and use of health services). Additionally, health effects from some pollutants may occur at levels lower than those specified in the National Ambient Air Quality Standards (NAAQS). Data issues for this objective are discussed in more detail in *Healthy People Statistical Notes* No. 9 (7).

Data for **11.7** (toxic agent release) are from the Toxic Chemical Release Inventory maintained by EPA. The inventory estimates of prior year releases are provided to EPA by industry, which periodically revises these estimates. These revisions are permitted under the Community Right to Know Act of 1986; however, they complicate monitoring of this objective.

Data for **11.8** are estimates of per capita waste production and per capita recycling. While pounds of waste produced have increased beyond the target set for the year 2000, pounds recycled have increased at a faster rate so that final levels of waste after recovery have decreased and met the year 2000 target.

Although drinking water quality has improved, data for **11.9** (safe drinking water) have remained relatively unchanged for the past 5 years because of an increase in the number of maximum contaminant level (MCL) standards used to define safe drinking water. For the past several years, compliance has also been based on reporting and treatment standards, as well as contaminants. Additionally, the proportions reported for this objective reflect the proportion of community water systems, rather than the proportion of the population (which is stated in the objective). The proportion of the population served by community water systems has increased over the years; currently they serve nearly 98 percent of the population.

Data for objective **11.15** (hazardous waste recycling) include both permanent (year-round) and temporary (1 day) recycling programs. The data for temporary programs in 1995 are estimated numbers.

For objective **11.17** (children's exposure to tobacco smoke at home), the definition of regular exposure is defined as the occurrence of tobacco smoking anywhere in the home on 4 or more days each week.

Proxy Data

Updates for **11.6** (radon testing) come from the NHIS and represent the proportion of people living in homes where a survey respondent reported that they knew what radon was and had tested their home for radon; the objective calls for an increase in the proportion of homes that had been tested. The update data for children represent the proportion of homes with children 6 years of age and under where the respondent reported testing for radon. The update data on smokers were limited to those who reported smoking at home 4 or more days a week.

Data for **11.11** (lead paint testing) are also provided by the NHIS and represent the proportion of people who reported testing their homes (if built before 1950) for lead paint, rather than the proportion of homes built before 1950 tested for lead-based paint as called for in the objective.

Data Availability

There were no further updates for tracking disclosure of lead paint (**11.13**) beyond 1991. Federal regulations promulgated in 1996 require disclosure of the presence of lead paint in all pre-1978 houses in all 50 States during sales or leasing.

The Agency for Toxic Substances and Disease Registry (ATSDR) reported that, in 1995, EPA and States had followed 90 percent of their recommendations at National Priorities List (NPL) sites with health concerns or hazards where ATSDR had made recommendations (**11.14**). This level of concurrence, however, will vary from year to year because the number of NPL sites continues to vary and there may be a lag between the time that sites are listed; ATSDR makes recommendations and EPA and States act on those recommendations.

The data for objective **11.16** (sentinel environmental diseases) include data reported by States in surveys conducted by the Council of State and Territorial Epidemiologists (CSTE) and Public Health Foundation (PHF). Additionally, CDC is working with other government and nongovernment organizations to develop guidelines to improve State capacity to conduct environmental surveillance.

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Table 11. Environmental Health objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	11.1	**Asthma hospitalizations** (per 100,000)	1987	188	192	196	183	183	174	194	179	179	155	---	160
		a. Black and other nonwhite	1987	334	340	349	380	290	353	368	360	342	292	---	265
		b. Children 14 years and under	1987	284	308	339	344	280	295	369	338	358	277	---	225
		c. Female 25 years and over	1988	229	235	235	216	198	202	219	201	197	191	---	183
▨	11.2*	**Serious mental retardation** (per 1,000)													
		Children 10 years with IQ less than 50	1985–87	[8]3.1	---	---	[1]3.6	---	---	---	---	---	---	---	2.0
■	11.3	**Waterborne diseases** (number of outbreaks)	1988	16	14	15	19	17	11	16	6	7	10	---	11
		a. People served by community water systems	1988	4	3	2	5	9	5	8	2	2	6	---	2
☐	11.4	**Blood lead levels among children** (6 months to 5 years)													
		Levels exceeding 15 µg/dL	1984	3 million	---	---	---	---	[2]393,000	---	---	---	---	---	300,000
		Levels exceeding 25 µg/dL	1984	234,000	---	---	---	---	[2]59,000	---	---	---	---	---	0
		a. Inner-city low-income black children													
		Levels exceeding 15 µg/dL	1984	234,900	---	---	---	---	[2]93,000	---	---	---	---	---	75,000
		Levels exceeding 25 µg/dL	1984	36,700	---	---	---	---	[2]18,000	---	---	---	---	---	0
☐	11.5	**Proportion of people in counties that have not exceeded standards for air pollutants**[3]													
		Total population (any of the following pollutants)	1988	49.7%	69.4%	65.3%	78.4%	76.5%	75.1%	67.1%	81.3%	78.9%	76.5%	---	85%
		Ozone	1988	53.6%	74.2%	72.0%	82.1%	79.5%	79.9%	71.5%	83.3%	80.7%	79.5%	---	85%
		Carbon monoxide	1988	87.8%	91.1%	92.0%	94.3%	95.4%	93.9%	95.2%	94.9%	96.4%	95.9%	---	85%
		Nitrogen dioxide	1988	96.6%	96.5%	96.5%	100%	100%	100%	100%	100%	100%	100%	---	85%
		Sulfur dioxide	1988	99.3%	99.4%	98.0%	100%	99.4%	100%	100%	99.9%	99.9%	100%	---	85%
		Particulates	1988	89.4%	92.3%	91.4%	89.6%	97.5%	94.8%	90.2%	97.1%	96.8%	97.3%	---	85%
		Lead	1988	99.3%	97.8%	94.1%	98.1%	97.8%	98.3%	98.1%	98.3%	99.0%	98.3%	---	85%
☐	11.6	**Proportion of homes with radon testing**	1989	Less than 5%	[4]5.6%	[4]8.7%	---	[4]11.4%	[4]11.0%	---	---	---	[4]17.5%	---	40%
		a. Homes with smokers and former smokers[5]	1990	5.2%	...	6.9%	---	10.3%	8.8%	---	---	---	16.0%	---	50%
		b. Homes with children	1990	[6]6.8%	...	[7]10.7%	---	[7]13.8%	[7]13.1%	---	---	---	[7]20.0%	---	50%
☐	11.7	**Toxic agent releases**													
		DHHS list of carcinogens (billion pounds)	1988	[8]0.35	0.28	0.23	0.21	0.19	0.18	0.17	---	---	---	---	0.12
		ATSDR list of the most toxic chemicals (billion pounds) 275 substances	1988	[8]2.15	1.75	2.04	1.39	1.64	1.04	1.02	---	---	---	---	1.08
☐	11.8	**Solid waste** (average pounds per person per day)	1988	4.0	4.3	---	4.5	4.4	4.5	4.4	4.3	4.4	4.5	---	4.3
		After recovery (recycling and composing)	1988	3.5	3.6	---	3.6	3.4	3.4	3.3	3.2	3.2	3.2	---	3.2
☐	11.9	**People receiving safe drinking water**	...	---	---	---	---	---	---	98%	---	---	---	---	---
		Proportion of community water systems meeting standards	1988	[8]73%	73%	72%	72%	68%	66%	73%	73%	74%	76%	77%	85%
		Number of Maximum Contaminant Level Standards in force	...	---	36	57	81	81	81	81	81	81	81	---	...

See footnotes and key at end of table.

Table 11. Environmental Health objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	11.10	**Waters supporting beneficial uses**													
		Rivers supporting:													
		Consumable fish	1992	89%	...	...	...	- - -	95%	- - -	85%	- - -	88%	- - -	94%
		Recreational activities	1992	71%	...	...	...	- - -	77%	- - -	79%	- - -	72%	- - -	85%
		Lakes supporting:													
		Consumable fish	1992	64%	...	...	...	- - -	82%	- - -	63%	- - -	59%	- - -	82%
		Recreational activities	1992	77%	...	...	...	- - -	81%	- - -	75%	- - -	80%	- - -	88%
		Estuaries supporting:													
		Consumable fish	1992	94%	...	...	...	- - -	92%	- - -	76%	- - -	65%	- - -	97%
		Recreational activities	1992	83%	...	...	...	- - -	85%	- - -	84%	- - -	91%	- - -	91%
☐	11.11	**Homes built before 1950 tested for lead-based paint**	1990	Less than 5%	...	- - -	- - -	9%	- - -	- - -	- - -	- - -	15%	- - -	50%
☐	11.12	**Number of States with construction standards to minimize radon concentrations**	1989	1	3	- - -	- - -	[8]3	- - -	- - -	- - -	6	- - -	- - -	35
☐	11.13	**Number of States requiring disclosure of lead and radon concentrations**													
		Lead-based paint and radon	1989	1	1	3	- - -	- - -	- - -	- - -	- - -	28	- - -	- - -	30
		Lead-based paint	1989	2	2	5	- - -	- - -	- - -	- - -	[9]50	[9]50	[9]50	[9]50	30
		Radon	1989	1	3	5	- - -	13	- - -	[10]26	- - -	28	- - -	- - -	30
☐	11.14	**Significant health risks from hazardous waste sites**													
		Number of sites on National Priority List	1990	[5]1,079	...	- - -	1,199	- - -	- - -	1,232	1,210	- - -	1,200	1,400	...
		Percent of sites identified with public health hazards/concerns where ATSDR recommendations were implemented	...	- - -	- - -	- - -	- - -	- - -	- - -	[11]90%	- - -	- - -	- - -	- - -	100%
■	11.15	**Recyclable materials and household hazardous waste programs**													
		Population served by curbside recycling	1991	26%	...	...	30%	39%	42%	46%	51%	51%	51%	- - -	50%
		Permanent and temporary household hazardous waste recycling programs[12]	1991	802	...	...	867	1,223	- - -	[13]2,184	- - -	[14]3,000	- - -	- - -	1,529
		Permanent programs	1991	96	...	...	- - -	- - -	- - -	284	- - -	- - -	- - -	- - -	215
		Temporary programs	1991	706	...	...	- - -	- - -	- - -	[13]1,900	- - -	- - -	- - -	- - -	1,314
		States with at least one program	...	- - -	[15]28	50	50	50	50	50	50	50	50	50	...
☐	11.16	**Number of States that track sentinel environmental diseases**													
		Plans established and monitored	1990	0	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	35
		Federal funds for surveillance	...	- - -	- - -	- - -	8	10	19	27	31	36	- - -	- - -	...
		State data collection for specific diseases													
		Childhood lead poisoning	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	51	- - -	51	...
		Adult nonoccupational lead poisoning	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	28	- - -	33	...
		Mercury poisoning	...	- - -	- - -	- - -	- - -	9	- - -	- - -	- - -	15	- - -	17	
		Arsenic poisoning	...	- - -	- - -	- - -	- - -	8	- - -	- - -	- - -	11	- - -	14	

See footnotes and key at end of table.

Table 11. Environmental Health objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Cadmium poisoning	...	---	---	---	---	7	---	---	---	11	---	13	...
		Methemglobinemia	...	---	---	---	---	---	---	---	---	9	---	10	...
		Acute chemical poisoning	...	---	---	---	---	6	---	---	---	8	---	10	...
		Carbon monoxide poisoning	...	---	---	---	---	4	---	---	---	7	---	9	...
		Heatstroke	...	---	---	---	---	---	---	---	---	4	---	5	...
		Hypothermia	...	---	---	---	---	---	---	---	---	4	---	5	...
■	11.17*	**Children's exposure to smoke at home** (6 years and under)	1986	39%	---	32%	---	27%	27%	---	---	---	20%	---	20%

--- Data not available.
... Category not applicable.

Final objective status: ■ Met □ Toward □ Mixed/ no change ▨ Away □ Cannot assess

*Baseline has been revised.

[1] 1991–92 data.

[2] 1988–94 data for children 1–5 years.

[3] Data are based on 1990 county population estimates.

[4] The measure includes people in homes where an adult reported they knew what radon was.

[5] The measure includes people in homes where an adult reported that they smoked in their homes 4 or more days a week and knew what radon was.

[6] The measure includes people in homes where an adult reported that they had children 16 years or under and knew what radon was.

[7] The measure includes people in homes where an adult reported that they had children 6 years or under and knew what radon was.

[8] EPA developed model standards for control of radon in buildings in 1993.

[9] In 1996, EPA promulgated regulation requiring disclosure of lead-based paint in all pre-1987 housing during sales or leasing.

[10] Includes one territory in addition to the States.

[11] 90 percent represents 253 sites.

[12] Permanent programs are fixed locations where hazardous waste can be recycled year round; temporary programs are short-term sites where hazardous waste can be recycled. There has been a steady increase in permanent programs (from 27 in 1988 to 96 in 1991), whereas the number of temporary programs has declined.

[13] Estimated.

[14] In 1997, there were more than 3,000 household hazardous waste permanent collection programs and collection events throughout the United States.

[15] 1987 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
11.1, 11.1a–c	National Hospital Discharge Survey, CDC, NCHS.
11.2*	Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH. Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH.
11.3, 11.3a	Waterborne Surveillance System, CDC, NCEH.
11.4, 11.4a	National Health and Nutrition Examination Survey, CDC, NCHS.
11.5	National Air Quality and Emissions Trends Report, EPA, AIRS, OAR.
11.6	Baseline: EPA, OAR, Office of Radiation Programs.
11.6a,b	National Health Interview Survey, CDC, NCHS.
11.7	Toxic Chemical Release Inventory, EPA, OPPTS.
11.8	Characterization of Municipal Solid Waste in the United States, EPA, OSWER.
11.9	EPA Federal Reporting Data Base; EPA, Office of Water, Office of Ground Water and Drinking Water.
11.10	National Water Quality Inventory, EPA, Office of Water.
11.11	National Health Interview Survey, CDC, NCHS.
11.12	Environmental Law Institute.
11.13	Alliance to End Childhood Lead Poisoning, Environmental Law Institute.
11.14	National Priorities List, EPA, OSWER; Hazardous Substance Release and Health Effects Database, CDC, ATSDR.
11.15	Biocycle Journal of Waste Recycling; Wastewatch Center.
11.16	For funding data: CDC, NCEH. For State data collection: PHF; Council for State and Territorial Epidemiologists.
11.17*	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Update: National Health Interview Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

Environmental Health Objectives

11.1: Reduce asthma morbidity, as measured by a reduction in asthma hospitalizations to no more than 160 per 100,000 people.

> **11.1a**: Reduce asthma morbidity among blacks and other nonwhites, as measured by a reduction in asthma hospitalizations to no more than 265 per 100,000 people.
>
> **11.1b**: Reduce asthma morbidity among children, as measured by a reduction in asthma hospitalizations to no more than 225 per 100,000 people.
>
> **11.1c**: Reduce asthma morbidity among women, as measured by a reduction in asthma hospitalizations to no more than 183 per 100,000 people.

11.2*: Reduce the prevalence of serious mental retardation among school-aged children to no more than 2 per 1,000 children.

Duplicate objective: 17.8

11.3: Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning to no more than 11 per year.

> **11.3a**: Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning among people served by community water systems to no more than 2 per year.

11.4: Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among children aged 6 months–5 years to no more than 300,000 and zero, respectively.

> **11.4a**: Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among inner-city low-income black children (annual family income less than $6,000 in 1984 dollars) to no more than 75,000 and zero, respectively.

11.5: Reduce human exposure to criteria air pollutants, as measured by an increase to at least 85 percent in the proportion of people who live in counties that have not exceeded any Environmental Protection Agency standard for air quality in the previous 12 months.

11.6: Increase to at least 40 percent the proportion of homes in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

> **11.6a**: Increase to at least 50 percent the proportion of homes with smokers and former smokers in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.
>
> **11.6b**: Increase to at least 50 percent the proportion of homes with children in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

11.7: Reduce human exposure to toxic agents by decreasing the release of hazardous substances from industrial facilities:

> 65 percent decrease in the substances on the Department of Health and Human Services list of carcinogens.
>
> 50 percent reduction in the substances on the Agency for Toxic Substances and Disease Registry (ATSDR) priority list of the most toxic chemicals.

11.8: Reduce human exposure to solid waste-related water, air, and soil contamination, as measured by a reduction in average pounds of municipal solid waste produced per person each day to no more than 4.3 pounds before recovery and 3.2 pounds after recovery.

11.9: Increase to at least 85 percent the proportion of people who receive a supply of drinking water that meets the safe drinking water standards established by the Environmental Protection Agency.

11.10: Reduce potential risks to human health from surface water, as measured by an increase in the proportion of assessed rivers, lakes, and estuaries that support beneficial uses, such as consumable fishing and recreational activities.

Waters supporting beneficial use	2000 target (percent)
Rivers supporting:	
Consumable fish	94
Recreational activities	85
Lakes supporting:	
Consumable fish	82
Recreational activities	88
Estuaries supporting:	
Consumable fish	97
Recreational activities	91

11.11: Perform testing for lead-based paint in at least 50 percent of homes built before 1950.

11.12: Expand to at least 35 the number of States in which at least 75 percent of local jurisdictions have adopted construction standards and techniques that minimize elevated indoor radon levels in those new building areas locally determined to have elevated radon levels.

11.13: Increase to at least 30 the number of States requiring that prospective buyers be informed of the presence of lead-based paint and radon concentrations in all buildings offered for sale.

11.14: Eliminate significant health risks from National Priority List hazardous waste sites, as measured by performance of clean-up at these sites sufficient to eliminate immediate and significant health threats as specified in health assessments completed at all sites.

11.15: Establish curbside recycling programs that serve at least 50 percent of the U.S. population and continue to increase household hazardous waste collection programs.

Recyclable materials and household hazardous waste programs	2000 target (percent)
Percentage of population served by curbside recycling programs	50

Permanent and temporary household hazardous waste collection events	2000 target (number of events)
Permanent	215
Temporary	1,314
Total	1,529

11.16: Establish and monitor in at least 35 States plans to define and track sentinel environmental diseases.

11.17*: Reduce to no more than 20 percent the proportion of children aged 6 and younger who are regularly exposed to tobacco smoke at home.

Duplicate objective: 3.8

*Duplicate objective.

Priority Area 12 Food and Drug Safety

Background

Food Safety

Reducing the number of foodborne illnesses improves the public health more than most people might realize. An estimated 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths each year may be associated with microorganisms in food (1). Economic costs resulting from foodborne illnesses are estimated at over $3 billion each year for hospitalizations and between $20 billion and $40 billion each year for the cost of lost productivity (2). Foodborne disease cases and outbreaks sometimes result from failures in protective systems, but are often the result of improper food handling. Children, the very old, and people with immunologic deficiencies are at increased risk of infection and death resulting from food contamination. Reductions in foodborne illness will save lives, improve the quality of life, and save medical and other costs.

Drug Safety

While drugs provide great public benefits, their use carries a certain degree of risk with the possibility of injury and harm. Adverse drug reactions, defined as injuries resulting from medical intervention related to a drug, are estimated to play a role in more than 100,000 deaths nationwide each year (3). New drugs, which are being introduced at an increasing rate, are becoming more powerful and more complex. Older adults, who use more prescription and nonprescription medicines than younger people, are at increased risk of suffering adverse drug reactions (4,5). The physiological changes associated with increasing age and particular diseases and conditions may alter the effects of drugs. In addition, use of multiple medications increases the risk of an adverse outcome (4,5).

With the increasing number and complexity of prescription drugs, with more drugs being taken by increasingly large numbers of elderly patients, and with patients seeing multiple practitioners, it becomes more vital that each participant in the health care system—the patient, the health care provider, pharmaceutical manufacturers, and the regulators—be well informed with up-to-date information.

Data Summary

Highlights

Food Safety

One of the successes for food safety in the last decade of the 20th century was the drop in the incidence of listeriosis (**12.1**). The decrease was enough to reach the year 2000 target of 0.5 cases per 100,000 persons by 1992. Except for 1998, when large-scale outbreaks raised the incidence to 0.6 per 100,000, the incidence of listeriosis has remained at or below the target level ever since. The incidence of infection from other pathogens (**12.1**) fell as well, with the year 2000 targets being met for *Salmonella* species (13.6 per 100,000); *Campylobacter jejuni* (17.5 per 100,000); *Escherichia coli* O157:H7 (2.8 per 100,000); and *Listeria monocytogenes* (0.5 per 100,000) (6).

Significant progress was made in reducing the number of outbreaks caused by *Salmonella* serotype Enteritidis (**12.2**). Outbreaks dropped by 43 percent, from 77 outbreaks in 1987 to 44 outbreaks in 1999. Progress was also made toward the adoption by States and U.S. Territories of the *Food Code* (**12.4**)—first published in 1993 and updated and revised biennially since then. By 1999, a total of 82 percent of States and Territories either had adopted (46 percent) or were in the process of adopting (36 percent) the code (7). Federal, State, local, Territorial, and Tribal agencies adopt the code through their regular legal processes.

Drug Safety

By 1995, 98 percent of pharmacies were using computers, thus surpassing the year 2000 target of 75 percent for linked pharmacy systems (**12.5**).

Early in the 1990's, the target of 75 percent set for primary care providers routinely reviewing with their older patients all prescribed and over-the-counter medications each time a new medication is prescribed, and maintaining a list of current medications used by their patients (**12.6**) was surpassed by internists, with 77 percent conducting such reviews and 84 percent maintaining medication lists. In 1998, the proportion of nurse practitioners who routinely maintained a medication list for 81–100 percent of patients 65 years of age and over and who reviewed medication when prescribing for the same proportion of patients had increased to 71 percent and 68 percent, respectively, compared with 63 percent and 55 percent in 1992.

As of mid-2000, reporting of serious adverse drug reactions (**12.7**) had dropped to 65 percent as a proportion of all events reported to the Food and Drug Administration's (FDA) MedWatch, missing the target of 75 percent and falling below the 1993 baseline of 69 percent.

In 1998, about three-quarters of people who obtained new prescriptions received written information about these prescriptions at the pharmacy (**12.8**), up from 32 percent in 1992. Information includes directions for use (how much to take and how often to take it) and possible risks (precautions and side effects). Written information from the doctor's office increased only slightly, from 14 percent in 1992 to 16 percent in 1998. About 14 percent of consumers reported receiving verbal counseling on new prescriptions from pharmacies, while 24 percent received verbal information from prescribers. These proportions are the same or somewhat lower, respectively, than 2 years earlier, in 1996.

Summary of Progress

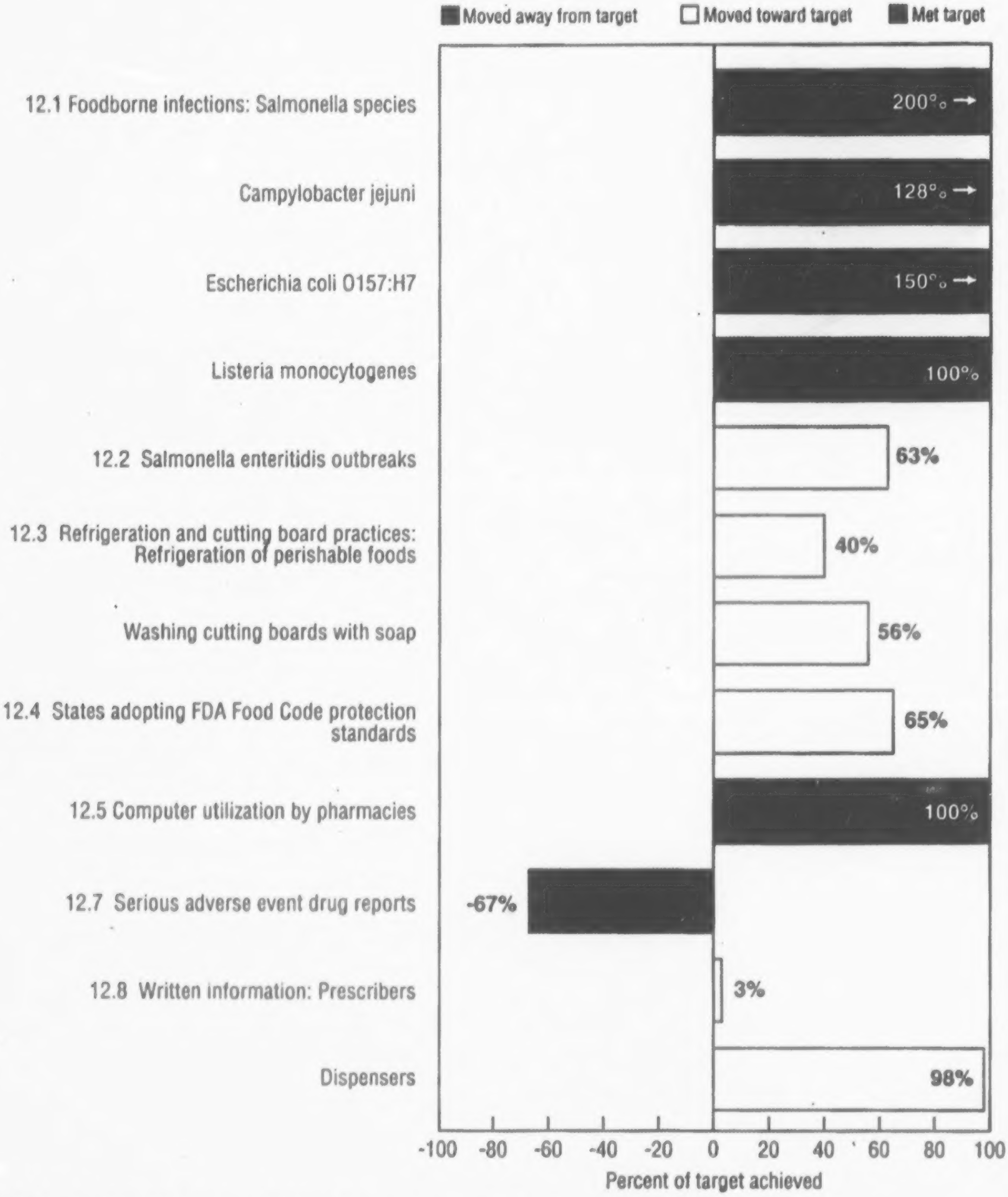
Two of the eight food and drug safety objectives met their targets (**12.1** and **12.5**). Five objectives (**12.2–12.4**, **12.6**, and **12.8**) show progress toward their respective targets, and one objective (**12.7**) is moving away from the target. See table 12 for the tracking data for the objectives in this priority area and figure 12 for a quantitative assessment of progress.

Discussion

Food Safety

The significant progress made in the United States in food safety can be attributed, in part, to increased consumer awareness, knowledge, and concern about foodborne illness. The proportion of people who thought that foodborne

Figure 12. Final status of Food and Drug Safety objectives



NOTES: Complete tracking data are shown in table 12. Progress quotients are not calculated for objective 12.6.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
FDA is Food and Drug Administration.

illness had increased during the previous 5 years rose from 26 percent in 1993 to 40 percent in 1998 (8). The proportion of people who thought that contamination of food by microorganisms was a serious food safety problem increased from 36 percent in 1993 to 55 percent in 1998 (8). Between 1993 and 1998, several large foodborne outbreaks occurred. Large multi-State outbreaks of illness from *E. coli* O157:H7, from hamburgers in 1993 and from fresh apple juice in 1996, caused serious illness and deaths. These outbreaks galvanized action by industry, agencies with responsibility for food safety, and consumers. After the *E. coli* O157:H7 outbreaks from ground beef, produce, and apple juice, more and more consumers have become familiar with the risk and even the names of some foodborne pathogens, particularly *Salmonella* species and *E. coli* O157:H7 (8).

Means to further improve food safety and reduce foodborne illness and outbreaks include regulatory implementation of safe food handling labels; development and regulatory implementation of the Food Safety Initiative (with cooperation and increased emphasis on surveillance, enforcement, research, traceback from illness outbreaks to determine causes and correct them, and education); regulatory adoption of the *Food Code*; development of key safe food handling practices and messages (for example, the Partnership for Food Safety Education's FightBac!™ messages of "clean, separate, chill, and cook to proper temperature" and the U.S. Department of Agriculture (USDA) Food Safety and Inspection Service's Thermy™, the thermometer use campaign); mandatory use of Hazard Analysis and Critical Control Point (HACCP) systems for seafood (1995), meat and poultry (1996), and most recently, for juice (9); development of and training in Good Agricultural Practices and Good Manufacturing Practices for produce and for eggs; and using quantitative microbial risk assessments to aid in developing action plans for foodborne pathogens (10,11)

Substantial advances were made in developing infrastructure and data gathering systems in the 1990s. During 1996, CDC, FDA, USDA, and participating agencies in several States and local metropolitan areas piloted an active surveillance program, the Foodborne Illness Active Surveillance Network (FoodNet). Early success of FoodNet in obtaining better foodborne illness estimates resulted in increased funding and cooperation for more sites and other illness-causing organisms to be added, especially following the announcement and funding of the Food Safety Initiative in 1997 (2).

Another data gathering system, PulseNet, allows comparison of pulsed field gel electrophoresis results against a database to determine if cases may be caused by the same strain of a microorganism, such as *L. monocytogenes*. The importance of this network, used by cooperating scientists in CDC, FDA, FSIS, and States, is that widespread outbreaks can now be detected.

Drug Safety

One possible explanation for the decrease in the proportion of adverse event drug reports voluntarily sent to FDA that are regarded as serious is the lack of health care organizations that are linked in an integrated system that monitors and reports adverse events. At the end of the 20th century, little collaboration exists between Federal authorities and researchers with pharmacoepidemiological databases to monitor suspected associations between specific drug exposure and specific adverse events and in estimating such risk.

Transition to *Healthy People 2010*

Healthy People 2010 includes a focus area on Food Safety and another on Medical Product Safety, which replace the *Healthy People 2000* priority area on Food and Drug Safety. The *Healthy People 2010* food safety objectives were chosen, expanded, or changed using a scientific basis for assessing public health improvements. The science-based Food Safety Initiative (FSI) guided development of the objectives and the chapter (2).

Food Safety

Healthy People 2010 has seven food safety objectives, several of which have multiple subobjectives. In addition to the four microorganisms tracked for foodborne infections in *Healthy People 2000*, *Healthy People 2010* added three developmental subobjectives to track the incidence of *Cyclospora cayetanensis*, congenital *Toxoplasmosis gondii* (both parasites), and hemolytic uremic syndrome. A subobjective was added to the objective on foodborne outbreaks for tracking outbreaks of *E. coli* O157:H7. Other new objectives address antimicrobial resistance of *Salmonella* species, anaphylactic deaths from food allergens, consumer food safety practices, retail food safety practices, and exposure to organophosphate pesticide residues.

The *Healthy People 2010* Food Safety focus area also indicates related objectives in other focus areas—Environmental Health, Immunization and Infectious Diseases, Occupational Safety and Health, and Public Health Infrastructure.

Medical Product Safety

The Medical Product Safety focus area in *Healthy People 2010* moves beyond the issues of drug safety to encompass biological products and medical devices as well. It addresses the issues covered in *Healthy People 2000* with a recognition that such topics pertain to medical products overall. The focus area includes objectives on monitoring adverse medical events, linked automated information systems, receipt of useful information about prescriptions from pharmacies, and receipt of oral counseling about medications from prescribers and dispensers. An objective on the supply of blood from donors is also included. Objectives related to medical product safety are found in other *Healthy People 2010* focus areas—Access to Quality Health Care, Cancer, Chronic Kidney Disease, Diabetes, Educational and Community-Based Programs, Family Planning, Health Communication, Heart Disease and Stroke, Injury and Violence Prevention, Public Health Infrastructure, and Respiratory Diseases.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting on changes and new knowledge in the area of food and drug safety.

Data Issues

Definitions

For objective 12.4, States and Territories with at least one agency adopting the *Food Code* are considered to have adopted it. In the earlier part of the decade, there was a high proportion of States and Territories reviewing the *Code*; in the later years, as more States and Territories adopted it, the proportion reviewing it declined. In 2000, the proportions reviewing and adopting the *Code* did not add to 100 percent, as some States and Territories were neither reviewing nor had adopted the *Code*.

The definition of a serious adverse event (**12.7**) includes events that are life threatening and require intervention to prevent permanent damage as well as death, hospitalization, disability, and congenital anomaly (12).

For objective **12.8**, receipt of useful information for new prescriptions, a prescriber is anyone who is authorized to prescribe, including physicians, nurse practitioners, and physician assistants, depending on the State law. Dispensers are persons authorized to dispense prescription medications and include physicians and pharmacists (12).

Data Sources

Starting in 1996, foodborne illness incidence data for objective **12.1** have been obtained from FoodNet. Although the data are collected in geographically distinct areas, surveillance is active; the estimates provided are thought to be better estimates than those obtained in the past through national passive reporting of data. Before FoodNet, national data and national estimates were not available for *Campylobacter* species and *E. coli* O157:H7. FoodNet is the principal foodborne disease component of CDC's Emerging Infections Program (EIP). It is a collaborative project of the CDC, nine EIP sites (California, Colorado, Connecticut, Georgia, New York, Maryland, Minnesota, Oregon, and Tennessee), the USDA and FDA. The project consists of active surveillance for foodborne diseases and related epidemiologic studies designed to help public health officials better understand the epidemiology of foodborne diseases in the United States. Foodborne diseases include infections caused by bacteria such as *Salmonella*, *Shigella*, *Campylobacter*, and *Vibrio* species, *Escherichia coli* O157, *Listeria monocytogenes*, *Yersinia enterocolitica*, and parasites such as *Cryptosporidium* and *Cyclospora* species. In 1995, FoodNet surveillance began in five locations: California, Connecticut, Georgia, Minnesota, and Oregon. Each year the surveillance area, or catchment, has expanded, with the inclusion of additional counties or additional sites (New York and Maryland in 1998, Tennessee in 2000, and Colorado in 2001). The total population of the current catchment is 25.4 million persons, or 10 percent of the United States population. Additional information about FoodNet, including annual reports, is available on the Internet at http://www.cdc.gov/foodnet.

MedWatch, which is used to track objective **12.7**, is the FDA Medical Products Reporting and Safety Information Program. It provides important and timely clinical information about safety issues involving medical products, including prescription and over-the-counter drugs, biologics, dietary supplements, and medical devices. MedWatch allows healthcare professionals and consumers to report serious problems that they suspect are associated with the drugs and medical devices they prescribe, dispense, or use. Further information is available on the Internet at http://www.fda.gov/medwatch/index.html.

The baseline data on maintenance of a current medication list and medication review for older patients by primary care providers for objective **12.6** are from the Primary Care Provider Surveys (PCPS), drawn from a random stratified sample of members of the American College of Physicians from four geographic regions. Provider groups sampled included internists, pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. In 1992, response rates varied between 50–80 percent across these groups. The data represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients 65 years of age and over.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners. Progress for this objective was based on the reports of internists, who had met the target at baseline, and nurse practitioners.

Data Comparability

Starting in 1996, FoodNet active surveillance estimates have been used to track objectives **12.1** and **12.2** in place of passively collected national data. Although FoodNet sites have been added since 1996 to include a much larger portion of the U.S. population, the estimates reported for *Healthy People 2000* are based only on the five original (1996) FoodNet sites to keep the data as comparable as possible. Annual incidence rates are calculated using reported cases as the numerator and census estimates for individual catchment areas as the denominator (6).

Various surveillance systems of CDC, including the *Salmonella* Surveillance System, the *Campylobacter* Surveillance System, and the Bacterial Meningitis Surveillance System, were used to monitor progress for objectives **12.1** and **12.2** for data through 1994. The *Salmonella* Surveillance System is a passive laboratory-based system that uses reports from 49 States, FDA, and USDA. This system measures the incidence of infection from *Salmonella* species (**12.1**) and the number of outbreaks caused by *Salmonella* Enteritidis (**12.2**). Many factors, including the intensity of surveillance, the severity of the illness, access to medical care, and association with a recognized outbreak, affect whether the infection will be reported. When reporting is incomplete, the incidence of salmonellosis is substantially underreported.

The incidence of foodborne *Listeria monocytogenes*-induced infections (**12.1**) was measured until 1994 using the Bacterial Meningitis Surveillance System. This is an active laboratory-based surveillance system conducted in six States; it counts all cases of bacterial meningitis and other invasive bacterial diseases caused by the five most common pathogens causing bacterial meningitis, including *Listeria monocytogenes*. The participating surveillance areas represent several regions throughout the country and a population of 33.5 million, 14 percent of the U.S. population.

The *Campylobacter* Surveillance System is a passive system that receives weekly reports of laboratory isolates of *Campylobacter*. The number of participating States has increased each year. Surveillance mechanisms, including laboratory isolation procedures, vary from State to State.

Baseline data for refrigeration and cutting-board practices (**12.3**) were obtained from the 1988 Health and Diet Survey, FDA/USDA (HDS). Updates are from the Food Safety Survey, FDA, and USDA (FSS). The FSS is based on 20- to 30-minute telephone interviews with consumers to determine food safety knowledge, concern level, food handling practices, perception of risk, and consumption of potentially hazardous foods. In 1992–93, 1,620 people were surveyed and in 1997–98, 2,001 people were surveyed.

Proxy Data

Objective **12.5**, to increase the proportion of pharmacies and other dispensers of prescription medications that use linked systems to provide alerts to potential adverse drug reactions among medications dispensed by different sources to individual patients, is being tracked with proxy data. The data show the proportion of pharmacies with individual computer capability or the proportion of pharmacies that are part of a larger more integrated system such as a chain store computer system.

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Table 12. Food and Drug Safety objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
▨	12.1	**Foodborne infections** (cases per 100,000)													
		Salmonella species	1987	18	16	16	14	15	15	---	15	14	12	14	16
		Campylobacter jejuni	1987	50	---	---	---	---	---	---	24	25	21	18	25
		Escherichia coli O157:H7	1987	8	---	---	---	---	---	---	3	2	3	3	4
		Listeria monocytogenes	1987	0.7	0.77	0.61	0.45	0.44	0.42	---	0.5	0.5	0.6	0.5	0.5
☐	12.2	***Salmonella* serotype Enteritidis outbreaks**	1989	77	68	68	59	63	44	56	50	46	49	44	25
☐	12.3	**Refrigeration and cutting board practices**													
		For refrigeration of perishable foods	1988	70%	---	---	---	[1]72%	---	---	---	---	---	---	75%
		For washing cutting boards with soap	1988	66%	---	---	---	[1]65%	---	---	---	---	[2]71%	---	75%
		For washing utensils with soap	1988	55%	---	---	---	---	---	---	---	---	---	---	75%
☐	12.4	**Use of FDA Food Code by at least one agency within each State and U.S. Territory** (proportion of States and Territories)													
		Adopting food protection standards	1994	§2%	...	...	...	...	...	---	8%	16%	---	[3]46%	70%
		Reviewing food protection standards	...	---	---	---	---	---	80%	---	82%	---	---	[4]36%	...
■	12.5	**Linked pharmacy systems**[5]													
		Computer utilization by pharmacies	1993	95%	...	...	...	...	---	98%	---	---	---	---	75%
☐	12.6	**Providers reviewing medication for older patients**													
		Percent of clinicians routinely providing service to 81–100% of patients 65 years and over	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Maintenance of current medication list													
		Nurse practitioners	1992	63%	...	...	...	---	---	---	---	---	[2]71%	---	75%
		Obstetricians/gynecologists	1992	64%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
		Internists	1992	84%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
		Family physicians	1992	70%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
		Review of medications when prescribing													
		Nurse practitioners	1992	55%	...	...	...	---	---	---	---	---	[2]68%	---	75%
		Obstetricians/gynecologists	1992	60%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
		Internists	1992	77%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
		Family physicians	1992	63%	...	...	...	---	---	---	---	---	[2,6]---	---	75%
☐	12.7	**Adverse event drug reports**													
		Proportion voluntarily sent to FDA regarded as serious	1993	69%	...	...	...	...	70%	69%	63%	66%	62%	[7]65%	75%
☐	12.8	**Receipt of verbal and written information for new prescriptions**	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Written information													
		From prescribers	1992	14%	...	...	...	---	15%	---	16%	---	16%	---	75%
		From dispensers	1992	§32%	...	...	...	---	59%	---	71%	---	74%	---	75%
		Verbal counseling													
		From prescribers	...	---	...	...	...	...	...	...	26%	---	24%	---	...
		From pharmacists	...	---	...	...	...	...	...	...	14%	---	14%	---	...

--- Data not available.
... Category not applicable.
§Baseline has been revised.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

[1] 1992–93 data.
[2] 1997–98 data.
[3] 2000 data (at least one agency in each of 25 States + the District of Columbia).
[4] 2000 data (at least one agency in 18 of 50 States and 1 of 6 Territories).
[5] A linked system is one with individual computer capability or one that is part of a larger more integrated system such as a chain store computer system.
[6] Response rate for this group was too low to produce reliable estimates.
[7] Cumulative total as of July 20, 2000. In 1999, the estimate was 63%.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
12.1	Salmonella Surveillance System, CDC, NCID.
	Campylobacter Surveillance System, CDC, NCID.
	Bacterial Meningitis Surveillance System, CDC, NCID.
	1996–99 updates: Foodborne Disease Active Surveillance Network (FoodNet), CDC, USDA, FDA.
12.2	Salmonella Surveillance System, CDC, NCID.
	1996–99 updates: Foodborne Disease Active Surveillance Network (FoodNet), CDC, USDA, FDA.
12.3	Baselines: Health and Diet Survey, USDA/FDA.
	Updates: Food Safety Survey, FDA.
12.4	Listing of Reported Adoptions by Local, State, and National Jurisdictions, FDA, CFSAN.
12.5	Baseline: National Association of Retail Druggists.
	Update: American Society for Automated Pharmacies.
12.6	Baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
12.7	MedWatch, FDA.
12.8	FDA.

Food and Drug Safety Objectives

12.1: Reduce infections caused by key foodborne pathogens to incidences of no more than:

Disease	2000 target (per 100,000)
Salmonella species	16
Campylobacter	25
Escherichia coli O157:H7	4
Listeria monocytogenes	0.5

12.2: Reduce outbreaks of infections due to *Salmonella enteritidis* to fewer than 25 outbreaks yearly.

12.3: Increase to at least 75 percent the proportion of households in which principal food preparers routinely refrain from leaving perishable food out of the refrigerator for over 2 hours and wash cutting boards and utensils with soap after contact with raw meat and poultry.

12.4: Extend to at least 70 percent the proportion of States and territories that have implemented *Food Code 1993* for institutional food operations and to at least 70 percent the proportion that have adopted the new uniform food protection code that sets recommended standards for regulation of all food operations.

12.5: Increase to at least 75 percent the proportion of pharmacies and other dispensers of prescription medications that use linked systems to provide alerts to potential adverse drug reactions among medications dispensed by different sources to individual patients.

12.6: Increase to at least 75 percent the proportion of primary care providers who routinely review with their patients aged 65 and older all prescribed and over-the-counter medicines taken by their patients each time a new medication is prescribed.

12.7: Increase to at least 75 percent the proportion of the total number of adverse event reports voluntarily sent directly to FDA that are regarded as serious.

12.8: Increase to at least 75 percent the proportion of people who receive useful information verbally and in writing for new prescriptions from prescribers or dispensers.

Priority Area 13
Oral Health

Background

Oral health is an essential and integral component of health throughout life (1). Poor oral health and untreated oral diseases and conditions can have a significant impact on quality of life. Oral and craniofacial diseases result in needless pain and suffering; difficulty in speaking, chewing, and swallowing; increased costs of care; loss of self-esteem; decreased economic productivity through lost work and school days; and, in extreme cases, death (2). Conditions significantly affecting quality of life include dental caries, periodontal diseases, and oral cancer. In addition, cleft lip and palate, oral and facial pain, and reduced salivary flow affect a substantial proportion of the general population.

Approximately 70 million persons in the United States have untreated dental decay (3), despite dramatic declines in this infectious disease among children and adults in recent decades. Untreated tooth decay is a problem affecting 16 percent of children 2–4 years of age, 29 percent of those 6–8 years of age, 20 percent of adolescents 15 years of age, and approximately 30 percent of all adults (4). Disparities of at least 50 percent, with some approaching 100 percent, exist among children and adults, by race and ethnicity, as well as income and level of education.

Almost 25 percent of U.S. adults have severe periodontal disease that results in loss of connective tissue and bone that support teeth. This is a leading cause of bleeding, pain, infection, tooth mobility, and tooth loss. Tobacco use, especially cigarette smoking, is a significant risk factor for periodontal disease, accounting for up to one-half of all cases of periodontitis (5). Recent studies pointing to associations between periodontal diseases and low birth weight and premature births (6–8), as well as between periodontitis and heart disease and stroke (9–11) have heightened research interest in these diseases.

Some 31,000 new cases of oral and pharyngeal cancers were expected to be diagnosed in 1999, and approximately 8,100 persons were expected to die from the diseases (12). Oral and pharyngeal cancers are the 7th most common cancers found among white males (4th most common among black males) and the 14th most common among U.S. females. The 5-year survival rate for oral and pharyngeal cancers is only 53 percent (13), and most of these cancers are diagnosed at late stages (14). Only 13 percent of U.S. adults 40 years and over in 1998 reported having had an oral cancer examination in the past year (15), which is the recommended interval (16).

Many persons in the United States do not receive essential preventive and treatment services, which results in disparities in oral health status (17). Through increased access to appropriate and timely care, individuals can enjoy improved oral health. Barriers to care include cost; lack of dental insurance, public programs, or providers from underserved racial and ethnic groups; and fear of dental visits. Additionally, some people may have limited oral health literacy and may not understand the value of oral health or may not be able to find or understand information about how to obtain services.

Data Summary

Highlights

Although the percent of 6–8-year-old children with untreated dental decay (**13.2**) increased very slightly from 28 percent at baseline (1986–87) to the final data point of 29 percent (1988–94), the prevalence of dental sealants (**13.8**) doubled for 8 year olds—from 11 percent at baseline to 23 percent, still far from its 50 percent goal. By 1988–94, fewer adolescents 15 years of age (20 percent) had untreated dental decay (**13.2**) than in 1986–87 (24 percent); the prevalence of dental sealants tripled for 14 year olds (**13.8**), from 8 percent at baseline to 24 percent. Black and Hispanic children, whose baseline levels were substantially higher for dental caries and lower for sealant prevalence, showed little improvement in either untreated decay or dental sealants. The percent of adolescents 15 years of age who had ever had dental decay (**13.1**), improved substantially, almost to the target of 60 percent, dropping from 78 percent in 1986–87 to 61 percent in 1988–94. Among children 6–8 years of age, however, little improvement was noted during that period—54 percent versus 52 percent.

Oral cancer mortality (**13.7**) among both men and women 45–74 years of age, showed a steady improvement over the 1990s, surpassing their targets. Male deaths per 100,000 were reduced from 13.6 in 1987 to 10.4 in 1998; for females the reduction over the same time period was from 4.8 to 3.4. Black males, however, with a rate of 21.0 continue to have extremely high mortality rates due to oral cancer. Smokeless tobacco use (**13.17**) among 12–17-year-old males also reached its target, going from 6.6 percent in 1988 to 2.2 percent in 1998; improvement among young adults 18–24 years of age was less, from 8.9 percent to 6.9 percent in 1998. Among adults 35–44 years of age, the percentage who had lost no teeth (**13.3**), remained unchanged (31 percent) during the decade of the 1990s. Fewer adults had complete tooth loss (**13.4**) in 1998 compared with 1986—29 percent versus 36 percent. For adults with incomes of less than $15,000, the reduction in complete tooth loss was from 46 percent in 1986 to 41 percent in 1998.

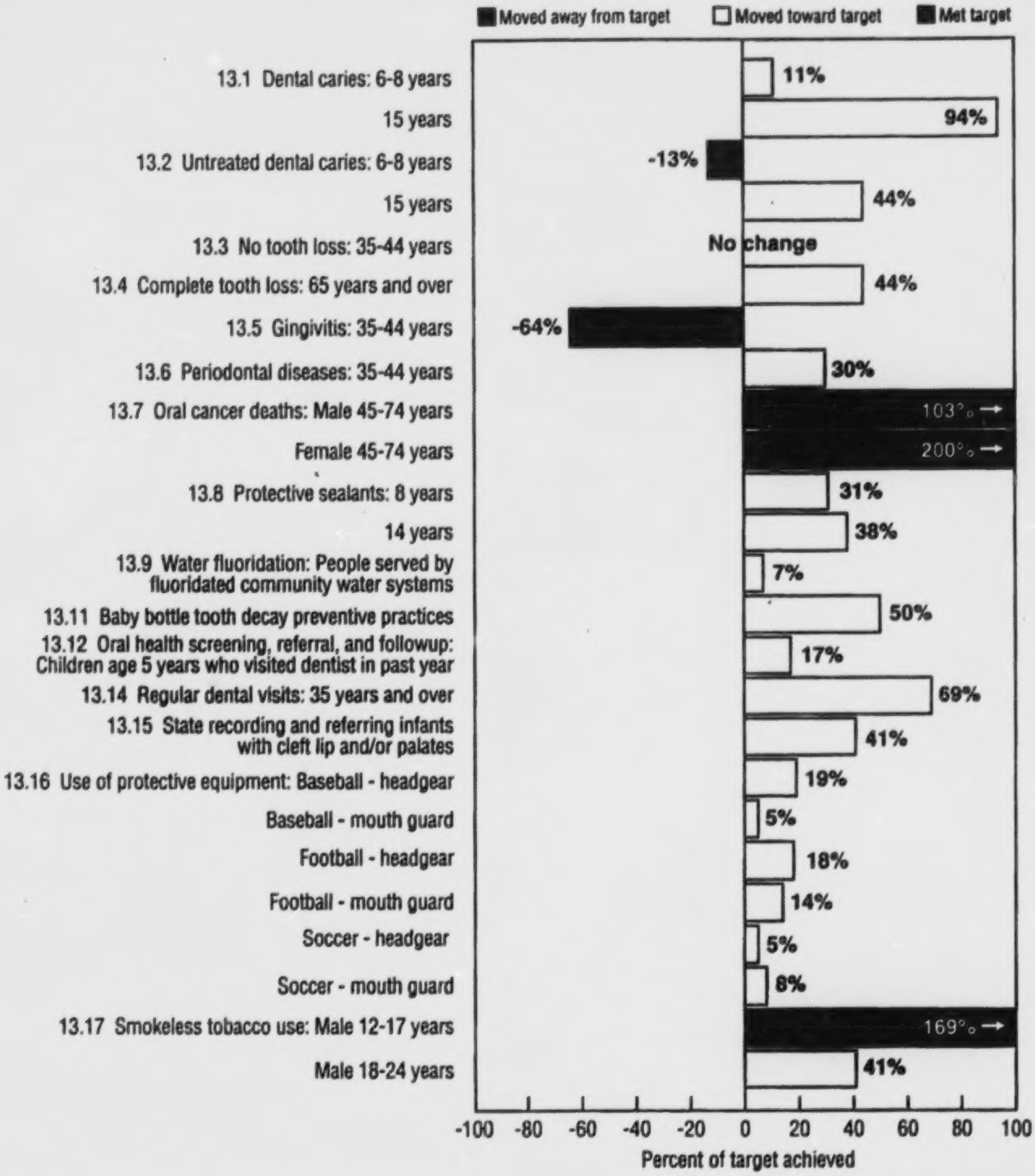
Substantial improvement over the decade was noted in the percent of people who self-reported a past year dental visit. Children 5 years of age (**13.12**) and adults over 35 years of age (**13.14**) both reached over half of their goal from baseline. The percentage of children with a past year dental visit increased from 66 percent in 1986 to 75 percent in 1997 (with gains for black children from 51 percent to 72 percent; for Hispanic children from 51 percent to 63 percent); for adults, the data were 54 percent at baseline and 65 percent in 1998.

Smaller gains were made in the percent of people served by community water fluoridation (**13.9**), oral health care for infants with cleft lips and/or palates (**13.15**), the percent of adults 35–44 years of age with destructive periodontal disease (**13.6**), and use of protective equipment in sporting and recreation events (**13.16**).

Summary of Progress

More than three-quarters of the 17 objectives that address oral health showed progress over the decade, with one objective (**13.7**) meeting its target. Twelve objectives (**13.1, 13.4, 13.6, 13.8, 13.9, 13.11–13.17**) moved toward their targets. Smokeless tobacco (**13.17**) met the target for adolescents 12–17

Figure 13. Final status of Oral Health objectives



NOTE: Complete tracking data are shown in table 13. Progress quotients are not calculated for objectives 13.10 and 13.13. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

years of age (but not for young adults 18–24 years of age, which made progress). Two objectives (13.5 and 13.10) moved away from their targets. One objective (13.3) had no change, and one objective (13.2), showed mixed progress. See table 13 for the tracking data for the objectives in this priority area and figure 13 for a quantitative assessment of progress.

Discussion

Although progress was made for the majority of oral health objectives, generally progress was relatively small. In addition, some of the data used to assess progress (for example, the 1988–94 National Health and Nutrition Examination Survey (NHANES) and the 1992 Fluoridation Census) were somewhat dated. It is possible that the availability of more timely data might have demonstrated more progress.

The level of available resources for oral health at the local, State, and Federal levels, including capacity and infrastructure, declined during the 1990s. Thus development and implementation of strategies to achieve the *Healthy People 2000* objectives were compromised. An increased focus on oral health in the late 1990s, lead by the Surgeon General's Report on Oral Health (1), should help achieve improvements in oral health and quality of life for individuals and communities. If initiatives, partnerships, and collaborations flourish, then oral health literacy will increase, access to preventive and restorative services for all persons in need will improve, surveillance of oral diseases or conditions will be enhanced, and appropriate research will explore new ways to improve oral health for everyone in the United States.

Transition to *Healthy People 2010*

The *Healthy People 2010* oral health chapter objectives were developed by a 26-member workgroup, composed equally of representatives of Healthy People Consortium member organizations and of Public Health Service representatives. An 11-member Review Panel also participated in the process that began in late 1997 and was completed in 1999.

Of the 17 *Healthy People 2000* objectives related to oral health, 15 objectives were carried over to *Healthy People 2010* in some form. Three objectives—oral cancer mortality, smokeless tobacco, and orofacial injuries—went to other chapters; in two instances, two objectives for *Healthy People 2000* were merged into one objective for *Healthy People 2010*. Thus 10 of the 17 objectives in the new *Healthy People 2010* chapter were a part of the *Healthy People 2000* objectives. New objectives relate to stage of detection of oral cancer lesions, receipt of annual examination for oral cancer, receipt of dental services for low-income children, school-based health centers with oral health components, health departments or community centers with oral health components, oral health surveillance, and increasing the number of public health trained professionals in oral health programs.

Oral health-related objectives are found throughout the *Healthy People 2010* document. Three objectives in other chapters are of particular note: oral cancer mortality in the Cancer chapter, minority oral health professionals in the Access to Care chapter, and diabetics who have had a past year dental visit in the Diabetes chapter.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 13 have been published in the National Center for Health Statistics' *Healthy People Statistical Notes* series (18). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided.

For objective 13.3, no tooth loss is defined as having 28 natural teeth exclusive of third molars. Destructive periodontal disease (13.6) is defined as one or more sites with 4 millimeters or greater loss of tooth attachment.

Objective 13.9 targets optimal levels of fluoride in community water systems. Optimal levels of fluoride are determined by the mean maximum daily air temperature over a 5–year period and range between 0.7 and 1.2 parts of fluoride per 1 million parts of water (ppm).

Objective 13.11 addresses feeding practices that prevent baby bottle tooth decay. The measure used to establish a baseline for this objective for the total population, caregivers with less than a high school education (13.11a), blacks (13.11c), and Hispanics (13.11d) is for children 6–23 months. The preventive feeding practices are either that the child no longer uses a bottle, never used a bottle, or if the child still uses a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

Data Comparability

Baseline data for 1986–87 from the National Survey of Dental Caries in U.S. school children for objectives 13.1, 13.2, and 13.8 and 1988–94 updates from the NHANES III are not strictly comparable because of different sampling designs. The 1986–87 survey sampled only children attending schools while the NHANES III sampled all noninstitutionalized children.

Changes in the National Health Interview Survey (NHIS) questions on oral health between 1989 and 1991 affect comparability of information on the proportion of 5-year old children and adults 35 years and over who visited a dentist in the past 12 months (13.12 and 13.14, respectively). In 1986 and 1989, the question on dental visits in the past 12 months followed an introductory statement and questions about dental visits and problems in the past 2 weeks (19,20). The introduction and question on visits in the past 2 weeks were not included in the 1991 and more recent surveys. These may have differentially affected recall about visits in the past 12 months. A second difference is that the proportion of people who had visited a dentist in the past 12 months was based on a question about the interval since the last dental visit in the 1986 and 1989 surveys. Since 1991, this measure was obtained from a question about the number of visits to a dentist in the past year. Finally, in 1986 and 1989 oral health data for adults were obtained from a knowledgeable respondent who provided information for all people in the household. Beginning in 1991, an adult sampled from each family provided information only for himself or herself and not others in the household. A knowledgeable adult provided information for children in all survey years.

The National Household Survey on Drug Abuse is used to measure objective **13.17** regarding smokeless tobacco use among adolescents. An improved questionnaire and editing procedures were introduced with the 1994 survey and affect comparability with previous years, especially for tobacco use among adolescents. For males 12–17 years of age, a smokeless tobacco user is someone who has used snuff or chewing tobacco in the preceding month. For males 18–24 years of age, a smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco.

Proxy Data

Nationally representative data on topical or systemic fluoride use among people not receiving optimally fluoridated public water are not readily obtainable (**13.10**). It is difficult to identify a national sample of people who are not served by a fluoridated water system. Survey interview methods are limited because many people cannot accurately state the fluoridation status of their water supply. For this reason, a proxy measure—the proportion of all U.S. residents who use fluoride—is used as the revised baseline and has been used to monitor progress toward achieving this objective. The original baseline showing use of fluoride products among people without fluoridated water was approximated from the 1989 NHIS data and information on water fluoridation patterns in the United States.

The additional data for objective **13.16** (protective sports equipment) are from the NHIS and represent the proportions of children playing baseball, softball, football, or soccer who use headgear or mouthguards.

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Table 13. Oral Health objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	13.1	**Dental caries**													
		Children 6–8 years	1986–87	54%	---	---	---	---	[1]52%	---	---	---	---	---	35%
		Adolescents 15 years	1986–87	78%	---	---	---	---	[1]61%	---	---	---	---	---	60%
		a. Children 6–8 years whose parents have less than high school education	1986–87	70%	---	---	---	---	[1]66%	---	---	---	---	---	45%
		b. American Indian/Alaska Native children 6–8 years													
		Primary or permanent teeth	...	---	---	88%	---	---	---	---	---	---	---	89%	45%
		Primary teeth	1983–84	92%	---	---	---	---	---	---	---	---	---	---	...
		Permanent teeth	1983–84	52%	---	---	---	---	---	---	---	---	---	---	...
		c. Black children 6–8 years	1986–87	56%	---	---	---	---	[1]50%	---	---	---	---	---	40%
		d. American Indian/Alaska Native adolescents 15 years	1983–84	93%	---	90%	---	---	---	---	---	---	---	88%	70%
☐	13.2	**Untreated dental caries**													
		Children 6–8 years	1986–87	28%	---	---	---	---	[1]29%	---	---	---	---	---	20%
		a. Children whose parents have less than a high school education	1986–87	43%	---	---	---	---	[1]44%	---	---	---	---	---	30%
		b. American Indian/Alaska Native children	1983–84	64%	---	72%	---	---	---	---	---	---	---	69%	35%
		c. Black children	1986–87	[5]38%	---	---	---	---	[1]36%	---	---	---	---	---	25%
		d. Hispanic children	1982–84	[5,2]45%	---	---	---	---	[1,2]48%	---	---	---	---	---	25%
		Adolescents 15 years	1986–87	24%	---	---	---	---	[1]20%	---	---	---	---	---	15%
		e. Adolescents whose parents have less than a high school education	1986–87	41%	---	---	---	---	[1]29%	---	---	---	---	---	25%
		f. American Indian/Alaska Native adolescents	1983–84	84%	---	61%	---	---	---	---	---	---	---	67%	40%
		g. Black adolescents	1986–87	38%	---	---	---	---	[1]29%	---	---	---	---	---	20%
		h. Hispanic adolescents	1982–84	[5,2]45%	---	---	---	---	[1,2]36%	---	---	---	---	---	25%
☐	13.3	**No tooth loss**													
		People 35–44 years	1985–86	31%	---	---	---	---	[1]31%	---	---	---	---	---	45%
☐	13.4	**Complete tooth loss**													
		People 65 years and over	1986	36%	32%	32%	---	30%	---	---	---	[4]30%	[4]29%	---	20%
		a. Low-income people													
		Annual family income less than $15,000	1986	46%	45%	45%	---	42%	---	---	---	[4]44%	[4]41%	---	25%
		Annual family income below poverty level	...	---	---	---	---	48%	---	---	---	[4]46%	[4]44%	---	...
		b. American Indian/Alaska Native	1991	42%	---	---	---	[3]---	---	---	---	[3]---	[3]---	29%	20%
■	13.5	**Gingivitis**													
		People 35–44 years	1985–86	41%	---	---	---	---	[1]48%	---	---	---	---	---	30%
		a. Low-income people (annual family income less than $12,500)	1985–86	50%	---	---	---	---	[1]66%	---	---	---	---	---	35%
		b. American Indian/Alaska Native	1983–84	95%	---	96%	---	---	---	---	---	---	---	96%	50%
		c. Hispanic	...	---	---	---	---	---	---	---	---	---	---	---	50%
		Mexican American	1982–84	74%	---	---	---	---	[1]64%	---	---	---	---	---	...
		Cuban	1982–84	79%	---	---	---	---	---	---	---	---	---	---	...
		Puerto Rican	1982–84	82%	---	---	---	---	---	---	---	---	---	---	...

See footnotes and key at end of table.

Table 13. Oral Health objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	13.6	**Periodontal diseases**													
		People 35–44 years	1985–86	25%	---	---	---	---	[1]22%	---	---	---	---	---	15%
■	13.7*	**Oral cancer deaths** (per 100,000)													
		Male 45–74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	10.3	10.4	---	10.5
		Female 45–74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	3.5	3.4	---	4.1
		a. Black male 45–74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	20.6	21.0	---	26.0
		b. Black female 45–74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	5.2	4.6	---	6.9
☐	13.8	**Protective sealants**													
		Children 8 years	1986–87	11%	---	---	---	---	[1]23%	---	---	---	---	---	50%
		Adolescents 14 years	1986–87	8%	---	---	---	---	[1]24%	---	---	---	---	---	50%
		a. Black 8 years	1986–87	[3]4%	---	---	---	---	[1]11%	---	---	---	---	---	50%
		b. Black 14 years	1986–87	[3]3%	---	---	---	---	[1]5%	---	---	---	---	---	50%
		c. Hispanic 8 years	1986–87	[3]9%	---	---	---	---	[1,2]7%	---	---	---	---	---	50%
		d. Hispanic 14 years	1986–87	[3]6%	---	---	---	---	[1,2]7%	---	---	---	---	---	50%
☐	13.9	**Water fluoridation**													
		People served by community water systems	1989	61%	---	---	62%	---	---	---	---	---	---	---	75%
▨	13.10	**Topical and systemic fluorides**													
		People in nonfluoridated areas who use fluoride	1989	50%	---	---	---	---	---	---	---	---	---	---	85%
		Proportion of people (national) using:													
		Toothpaste containing fluoride	...	---	[4]94%	---	---	---	---	---	---	---	---	---	...
		Fluoride mouthrinse													
		Children and adolescents 6–17 years	...	---	[5]22.0%	---	---	---	---	---	---	---	---	---	...
		People 18 years and over	...	---	[5]7.7%	---	---	---	---	---	---	---	7.1%	---	...
		Fluoride supplements													
		Children and adolescents 2–16 years	...	---	[5]10.3%	---	---	---	---	---	---	---	---	---	...
☐	13.11*	**Baby bottle tooth decay**													
		Parents and caregivers who use preventive feeding practices	1991	55%	...	...	---	---	---	---	---	---	[6]65%	---	75%
		a. Parents and caregivers with less than high school education	1991	36%	...	...	---	---	---	---	---	---	[6]38%	---	65%
		b. American Indian/Alaska Native parents and caregivers	1985–89	74%	---	---	---	---	---	---	---	---	[3,6]...	---	65%
		c. Black parents and caregivers	1991	48%	...	...	---	---	---	---	---	---	[6]57%	---	65%
		d. Hispanic parents and caregivers	1991	39%	...	...	---	---	---	---	---	---	[6]46%	---	65%
☐	13.12	**Oral health screening, referral, and followup**													
		Children 5 years who visited the dentist in the past year	1986	66%	[5]60%	63%	---	---	---	---	---	75%	70%	---	90%
		a. Black 5 years	1991	51%	...	...	---	---	---	---	---	72%	67%	---	90%
		b. Hispanic 5 years	1991	51%	...	...	---	---	---	---	---	63%	64%	---	90%
☐	13.13	**Oral health care at institutional facilities**	...	---	---	---	---	---	---	---	---	---	---	---	100%
		Nursing facilities	1990	Required	---	---	---	---	---	---	---	---	---	---	...
		Federal prisons	...	---	---	---	---	---	---	---	---	---	---	---	...
		Nonfederal prisons	...	---	---	---	---	---	---	---	---	---	---	---	...

Table 13. Oral Health objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Juvenile homes	...	---	---	---	---	---	---	---	---	---	---	---	...
		Detention facilities	...	---	---	---	---	---	---	---	---	---	---	---	...
☐	13.14	**Regular dental visits**													
		People 35 years and over	1986	54%	[5]55%	58%	---	61%	---	---	---	‡63%	‡65%	---	70%
		a. Edentulous people 35 years and over	1986	11%	[5]13%	13%	---	16%	---	---	---	‡20%	‡21%	---	50%
		b. People 65 years and over	1986	42%	[5]43%	47%	---	51%	---	---	---	‡55%	‡56%	---	60%
		c. Black 35 years and over	1991	43%	...	...	---	46%	.	---	---	‡53%	‡53%	---	60%
		d. Mexican American 35 years and over	1991	38%	...	...	---	45%		---	---	‡47%	‡49%	---	60%
		e. Puerto Rican 35 years and over	1991	51%	...	...	---	37%		---	---	‡54%	‡56%	---	60%
☐	13.15	**Oral health care for infants with cleft lip and/or palate**													
		Number of States with systems for recording and referring infants with cleft lip and/or palates													
		Systems to identify and refer	1989	11	---	---	---	23	---	---	---	---	---	---	40
		Systems to identify infants	1989	25	---	---	---	34	---	---	---	---	---	---	40
		Systems to refer for care	1989	20	---	---	---	31	---	---	---	---	---	---	40
		Systems to identify, refer, and follow up for care	1993	[5]16	...	...	...	...	---	---	---	---	---	---	40
☐	13.16*	**Protective equipment in sporting and recreation events**	...	---	---	---	---	---	---	---	---	---	---	---	100%
		National Collegiate Athletic Association													
		Football	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		Hockey	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		Lacrosse	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		High school football	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		Amateur boxing	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		Amateur ice hockey	1988	Required	---	---	---	---	---	---	---	---	---	---	...
		Use of protective headgear and mouth guards among children who play sports													
		Baseball/softball													
		Headgear	...	---	---	35%	---	---	---	---	---	---	47%	---	...
		Mouth guard	...	---	---	7%	---	---	---	---	---	---	12%	---	...
		Football													
		Headgear	...	---	---	72%	---	---	---	---	---	---	77%	---	...
		Mouth guard	...	---	---	72%	---	---	---	---	---	---	76%	---	...
		Soccer													
		Headgear	...	---	---	4%	---	---	---	---	---	---	9%	---	...
		Mouth guard	...	---	---	7%	---	---	---	---	---	---	14%	---	...
☐	13.17*	**Smokeless tobacco use**													
		Male 12–17 years	1988	6.6%	---	5.3%	4.8%	3.9%	5.1%	4.9%	3.5%	3.7%	2.2%	---	4%
		Male 18–24 years	1987	8.9%	---	9.9%	8.2%	7.8%	6.9%	---	---	---	6.9%	---	4%
		a. American Indian/Alaska Native 18–24 years	1986–87	[7]18–64	---	[3]---	[3]---	[3]---	[3]---	---	---	---	[3]---	---	10%

- - - **Data not available.**

Final objective status: ■ **Met** ☐ **Toward** ☐ **Mixed/ no change** ■ **Away** ☐ **Cannot assess**

. . . Category not applicable.
[#] Baseline has been revised.
[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.
[1] 1988–94 data.
[2] Data are for Mexican Americans.
[3] Data are unreliable. Relative standard error is greater than 30%.
[4] 1986 data.
[5] 1989 data.
[6] Data are for children under 2 years. Baseline data are for children 6–23 months.
[7] Estimates for different tribes.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

Objective number	*Data source*
13.1, 13.1c	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.1a	Baseline: North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.1b, d	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.2, 13.2c, g	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.2a, e	Baseline: North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.2b, f	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.2d, h	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.3	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.4, 13.4a	National Health Interview Survey, CDC, NCHS.
13.4b	Baseline: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS. Update: National Health Interview Survey, CDC, NCHS.
13.5, 13.5a	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.5b	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.5c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.6	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.7*, 13.7a, b	National Vital Statistics System, CDC, NCHS.
13.8	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–1987, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.9	Fluoridation Census, CDC, NCPS.
13.10	National Health Interview Survey, CDC, NCHS.
13.11*, 13.11a, c, d	National Health Interview Survey, CDC, NCHS.
13.11b	1990 Baby Bottle Tooth Decay 5-Year Evaluation Report, IHS.
13.12	National Health Interview Survey, CDC, NCHS.

Objective number	*Data source*
13.13	Baseline: HCFA.
13.14	National Health Interview Survey, CDC, NCHS.
13.15	State Public Health Dentists Survey, Illinois State Health Department.
13.16*	1988 baseline: CDC, NCPS; NIH, NIDR. 1991 data: National Health Interview Survey, CDC, NCHS.
13.17*	For males 18–24 years, National Health Interview Survey, CDC, NCHS. For males 12–17 years, National Household Survey on Drug Abuse, SAMHSA, OAS.
13.17a	Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHSR. Updates: National Health Interview Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

Oral Health Objectives

13.1: Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 35 percent among children aged 6–8 and no more than 60 percent among adolescents aged 15.

> **13.1a**: Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among children aged 6–8 whose parents have less than a high school education.
>
> **13.1b**: Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among American Indian and Alaska Native children aged 6–8.
>
> **13.1c**: Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 40 percent among black children aged 6–8.
>
> **13.1d**: Reduce dental caries (cavities) so that the proportion of adolescents with one or more caries (in permanent teeth) is no more than 70 percent among American Indian and Alaska Native adolescents aged 15.

13.2: Reduce untreated dental caries so that the proportion of children with untreated caries (in permanent or primary teeth) is no more than 20 percent among children aged 6–8 and no more than 15 percent among adolescents aged 15.

> **13.2a**: Reduce untreated dental caries so that the proportion of lower socioeconomic status children aged 6–8 (those whose parents have less than a high school education) with untreated dental caries (in permanent or primary teeth) is no more than 30 percent.
>
> **13.2b**: Reduce untreated dental caries so that the proportion of American Indian and Alaska Native children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 35 percent.
>
> **13.2c**: Reduce untreated dental caries so that the proportion of black children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 25 percent.
>
> **13.2d**: Reduce untreated dental caries so that the proportion of Hispanic children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 25 percent.
>
> **13.2e**: Reduce untreated dental caries so that the proportion of lower socioeconomic status adolescents aged 15 (those whose parents have less than a high school education) with untreated dental caries (in permanent or primary teeth) is no more than 25 percent.
>
> **13.2f**: Reduce untreated dental caries so that the proportion of American Indian and Alaska Native adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 40 percent.
>
> **13.2g**: Reduce untreated dental caries so that the proportion of black adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 20 percent.
>
> **13.2h**: Reduce untreated dental caries so that the proportion of Hispanic adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 25 percent.

13.3: Increase to at least 45 percent the proportion of people aged 35–44 who have never lost a permanent tooth due to dental caries or periodontal diseases.

13.4: Reduce to no more than 20 percent the proportion of people aged 65 and older who have lost all of their natural teeth.

> **13.4a**: Reduce to no more than 25 percent the proportion of low-income people (annual family income less than $15,000) aged 65 and older who have lost all of their natural teeth.
>
> **13.4b**: Reduce to no more than 20 percent the proportion of American Indians and Alaska Natives aged 65 and older who have lost all of their natural teeth.

13.5: Reduce the prevalence of gingivitis among people aged 35–44 to no more than 30 percent.

> **13.5a**: Reduce the prevalence of gingivitis among low-income people (annual family income less than $12,500) aged 35–44 to no more than 35 percent.
>
> **13.5b**: Reduce the prevalence of gingivitis among American Indians and Alaska Natives aged 35–44 to no more than 50 percent.
>
> **13.5c**: Reduce the prevalence of gingivitis among Hispanics aged 35–44 to no more than 50 percent.

13.6: Reduce destructive periodontal diseases to a prevalence of no more than 15 percent among people aged 35–44.

13.7*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

Duplicate objectives: 3.17 and 16.17

> **13.7a***: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.
>
> Duplicate objectives: 3.17a and 16.17a
>
> **13.7b***: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 6.9 per 100,000 among black females aged 45–74.
>
> Duplicate objectives: 3.17b and 16.17b

13.8: Increase to at least 50 percent the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

> **13.8a**: Increase to at least 50 percent the proportion ofblack children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.
>
> **13.8b**: Increase to at least 50 percent the proportion of black children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.8c: Increase to at least 50 percent the proportion of Hispanic children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.8d: Increase to at least 50 percent the proportion of Hispanic children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.9: Increase to at least 75 percent the proportion of people served by community water systems providing optimal levels of fluoride.

13.10: Increase use of professionally or self-administered topical or systemic (dietary) fluorides to at least 85 percent of people not receiving optimally fluoridated public water.

13.11*: Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12

13.11a*: Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12a

13.11b*: Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12b

13.11c*: Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12c

13.11d*: Increase to at least 65 percent the proportion of Hispanic parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12d

13.12: Increase to at least 90 percent the proportion of all children entering school programs for the first time who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

13.12a: Increase to at least 90 percent the proportion of all black children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

13.12b: Increase to at least 90 percent the proportion of Hispanic children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

13.13: Extend to all long-term institutional facilities the requirement that oral examinations and services be provided no later than 90 days after entry into these facilities.

13.14: Increase to at least 70 percent the proportion of people aged 35 and older using the oral health care system during each year.

13.14a: Increase to at least 50 percent the proportion of edentulous people using the oral health care system during each year.

13.14b: Increase to at least 60 percent the proportion of people aged 65 and older using the oral health care system during each year.

13.14c: Increase to at least 60 percent the proportion of blacks aged 35 and older using the oral health care system during each year.

13.14d: Increase to at least 60 percent the proportion of Mexican-Americans aged 35 and older using the oral health care system during each year.

13.14e: Increase to at least 60 percent the proportion of Puerto Ricans aged 35 and older using the oral health care system during each year.

13.15: Increase to at least 40 the number of States that have an effective system for recording and referring infants with cleft lips and/or palates to craniofacial anomaly teams.

Identification and referral of infants with clefts	2000 target (number of States)
States with system to identify clefts	40
States with system to refer for care	40
States with system to follow-up	40
States with system to identify and refer	40

13.16*: Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risk of injury.

Duplicate objective: 9.19

13.17*: Reduce smokeless tobacco use by males aged 12–24 to a prevalence of no more than 4 percent.

Duplicate objective: 3.9

13.17a*: Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.

Duplicate objective: 3.9a

*Duplicate objective.

Priority Area 14 Maternal and Infant Health

Background

Improving the health of mothers and infants remains a national priority. The health of mothers and infants is both a reflection of the current health status of the population and a predictor of the health of the next generation.

Infant mortality is a particularly critical measure of a Nation's health and a worldwide indicator of health status and social well-being. In 1998, 28,371 infants died before their first birthday (1). This represents an infant mortality rate of 7.2 deaths per 1,000 live births, the lowest rate ever recorded for the United States. However, this achievement masks the persistent disparities among racial and ethnic groups; the mortality rate among black infants remained more than double that of white infants.

In addition, as infant mortality rates have declined, the rates of two important risk factors for infant mortality, preterm birth and low birth weight, are increasing (2). Therefore, concern for maternal and infant health encompasses not just the immediate indicators of maternal and infant survival but the risk and protective factors that contribute to the health of this population, including preconception counseling, early prenatal care, breastfeeding, newborn screening, and primary care in infancy.

Data Summary

Highlights

A major achievement in the area of maternal and infant health is the reduction in infant mortality (**14.1**) from the baseline rate of 10.1 deaths per 1,000 live births in 1987 to 7.2 in 1998. This overall decline incorporates decreases in both neonatal mortality (**14.1d**) and postneonatal mortality (**14.1g**). In fact, the target for postneonatal mortality of 2.5 deaths per 1,000 live births was exceeded in 1998, when a rate of 2.4 was recorded. Significant improvements were seen within each of the population groups measured for this objective, including blacks, American Indians/Alaska Natives, and particularly Puerto Ricans. Puerto Ricans have met or exceeded each of the objectives for infant, neonatal, and postneonatal mortality.

Progress toward other objectives was more modest. An increasing proportion of new mothers of all racial and ethnic groups were breastfeeding in the early postpartum period (**14.9**) and at 6 months postpartum, with 67 percent of women breastfeeding in the hospital and 31 percent still doing so 6 months later. Increases were noted among low-income women, black women, Hispanic women, and American Indians/Alaska Natives. In addition, a greater percentage of pregnant women received prenatal care in the first trimester (**14.11**); this proportion increased from 76 percent in 1987 to 83 in 1999. The rate of cesarean delivery (**14.8**) has declined as well, with the majority of the decrease attributable to the widespread promotion of vaginal birth after cesarean (VBAC) delivery for women who have had a previous cesarean. The cesarean delivery rate among women with a previous cesarean declined from 91.2 percent in 1987 to 69.3 in 1998, approaching the target of 65.

Unfortunately, ground was lost on several important indicators. The rate of low birth weight (**14.5**) has risen steadily since the baseline year, from 6.9 percent in 1987 to 7.6 in 1998. The rate of very low birth weight has also increased, from 1.2 percent to 1.4, over the same period. (It is notable, however, that the low birth weight rate among black infants, while it did not improve over this period, was essentially stable at 13 percent.) Low and very low birth weight infants are at significantly increased risk of infant death, and those who survive are more likely to experience long-term developmental disabilities. Another disturbing trend is the increase in the rate of maternal mortality (**14.3**), particularly among black women. This rate has risen from 6.6 maternal deaths per 100,000 live births to 7.1 for the population as a whole, and the rate for blacks has increased from 14.9 to 17.1 in 1998.

It is important to note that the wide racial and ethnic disparities seen in many of these objectives did not narrow substantially. In 1998, there was still a twofold differential between black and white rates of infant mortality, and the maternal mortality rate for blacks remained three times greater than that of whites. Black women also had lower rates of early prenatal care and breastfeeding than whites or Hispanics.

Summary of Progress

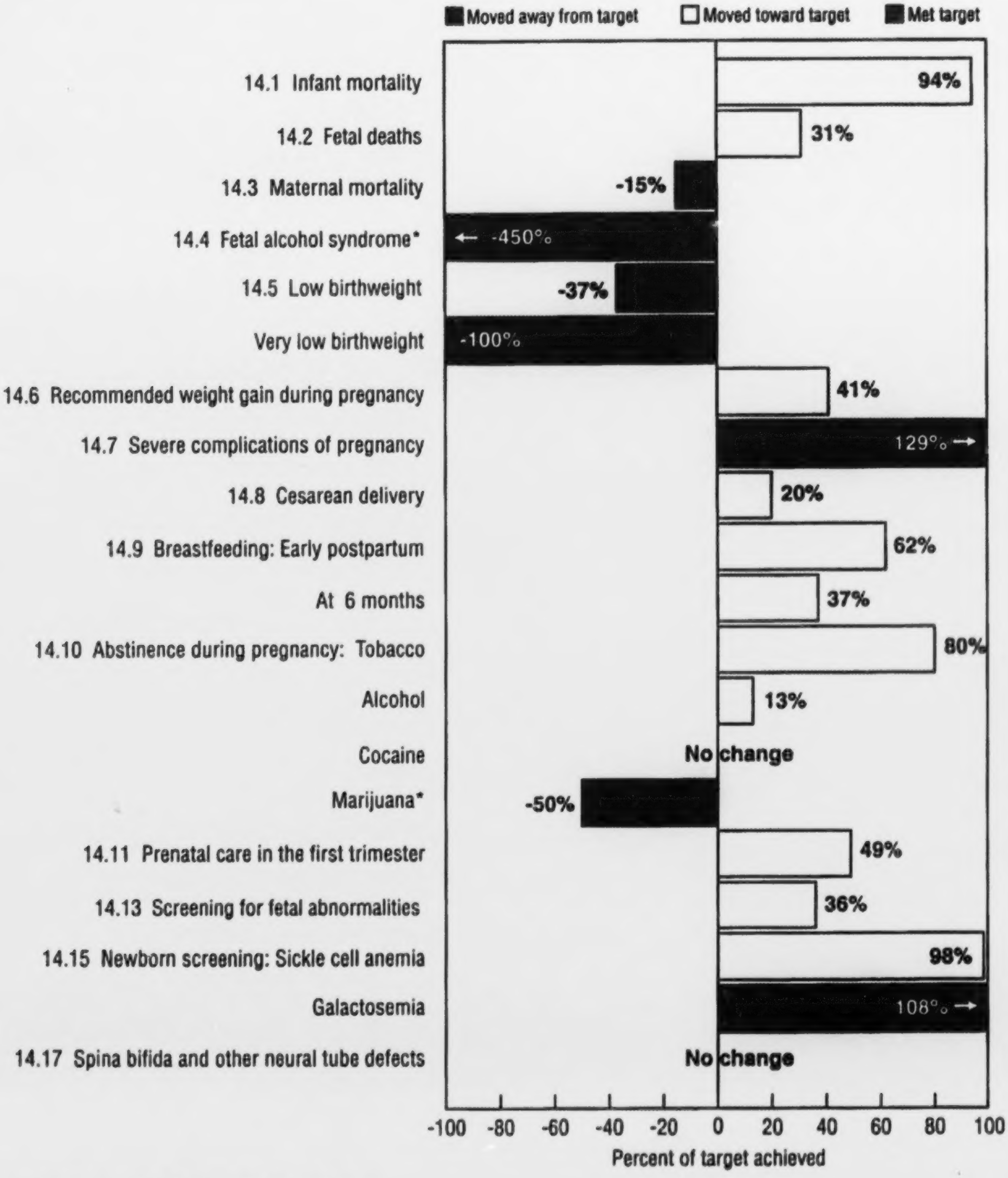
Of the 17 maternal and infant health objectives included in *Healthy People 2000*, data are available to assess the progress for 15 objectives. One objective (**14.7**) and five subobjectives (**14.1c**, **f**, and **j**, infant, neonatal, and postneonatal mortality among Puerto Ricians; **14.1g**, overall postneonatal mortality; and **14.15**, newborn screening for galactosemia) have met their targets. Overall, eight objectives (**14.1**, **14.2**, **14.6**, **14.8**, **14.9**, **14.11**, **14.13**, **14.15**) have moved toward their targets. For three objectives (**14.3–14.5**), movement has been away from their targets. No change was recorded for one objective (**14.17**).

For two of the remaining objectives (**14.10** and **14.12**), progress among the multiple measures showed mixed trends. For the remaining two (**14.14** and **14.16**), no data are available to assess progress. See table 14 for the tracking data for the objectives in this priority area and figure 14 for a quantitative assessment of progress.

Discussion

The decline in infant mortality over the past 10 years is likely due to the widespread application of advances in medical knowledge. Much of the decrease in neonatal mortality is probably attributable to the introduction in the early 1990s of synthetic surfactant, which allows small infants with undeveloped lungs to breathe, decreasing the incidence of intraventricular hemorrhage and the severity of respiratory disease in preterm, very small infants (3,4). The dramatic decline in postneonatal mortality is probably the result of widespread public education campaigns about the importance of infant sleep position. Much research has shown that nonprone sleeping position (that is, sleeping on the side or back rather than the stomach) greatly decreases the risk of SIDS among infants (5,6). The American Academy of Pediatrics has therefore recommended that healthy full-term infants be put down to sleep on their backs (7), and the National Institute for Child Health and Human

Figure 14. Final status of Maternal and Infant Health objective



* For explanation, see Data Comparability in chapter text.

NOTE: Complete tracking data are shown in table 14. Progress quotients are not calculated for objectives 14.12, 14.14, and 14.16. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

Development, National Institutes of Health, and the Maternal and Child Health Bureau, Health Resources and Services Administration, instituted the "Back to Sleep" campaign in 1994 to educate parents and physicians about this recommendation.

While the achievement of the target regarding the rate of severe pregnancy complications is commendable, the reasons for this progress bear some explanation. This objective monitors complications by measuring the number of hospitalizations for diagnoses related to pregnancy complications. The 1990s saw a dramatic increase in the use of managed care plans for the delivery of medical services in both the public and private sectors. One of the major cost-saving strategies used by these plans is to substitute ambulatory for inpatient care whenever possible; therefore, the statistic reported here may not be a true reflection of the incidence of severe pregnancy complications.

The increasing rate of low birth weight bears further scrutiny as well. Much of the increase in this rate since 1990 is attributable to increases in the rate of multiple births, which are much more likely than singleton births to be of low birth weight. Because of the increased use of assisted reproductive technologies, the number of twin births has risen 62 percent, and the rate of triplets or higher-order births rose 470 percent since 1980. These babies have a low birth weight rate of more than 50 percent, while the low birth weight rate among singletons is approximately 6 percent. In fact, the low birth weight rate among singleton births rose only 1 percent between 1989 and 1998 (2).

Transition to *Healthy People 2010*

The Maternal and Infant Health chapter of *Healthy People 2010* was developed by an interagency, multidisciplinary work group co-led by the Maternal and Child Health Bureau, Health Resources and Services Administration, and the Centers for Disease Control and Prevention. The group includes researchers, representatives of Federal agencies, and national membership organizations. The workgroup began meeting in October 1997 to review the maternal and infant health objectives in *Healthy People 2000*, to propose new objectives, to consider additions suggested by the public, and to set targets for the objectives after they had been selected.

The resulting chapter has become both broader, expanding to encompass objectives related to child health, birth defects, and developmental disabilities, and deeper, including new indicators of maternal and infant health that are based on the considerable scientific progress of the last 10 years. The chapter has been retitled the Maternal, Infant, and Child Health chapter in recognition of its broader scope, and contains 23 objectives in 8 categories. Objectives focusing on mortality include, in addition to infant, fetal and maternal deaths, perinatal deaths, deaths of children 5–14 years of age, as well as those of adolescents and young adults. Objectives addressing risk factors include new objectives on preterm births and infant sleep position. A new, more detailed focus on developmental disabilities has been added, with new objectives on the incidence of several specific conditions and folic acid intake among women of childbearing age. Finally, a set of objectives has been added that addresses specific issues for children with special health care needs, including the provision of medical homes and Statewide service systems for these children.

Nearly every chapter of *Healthy People 2010* contains objectives that relate directly to the goals of the Maternal, Infant, and Child Health chapter. These include the objectives under Access to Quality Health Services on the accessibility of health care and health insurance, those under Family Planning on adolescent pregnancy and sexual activity, those under Immunization and Infectious Diseases on immunization coverage for children, those under Injury and Violence Prevention on a range of child injury risks, and those under Oral Health on the prevalence of dental disorders and access to dental care.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the changes between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 14 have been published in the National Center for Health Statistics' (NCHS) Healthy People Statistical Notes series (8). Data issues are discussed and references are cited for expanded discussions of the systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided.

In 1989, NCHS changed the method for tabulating race for live births, assigning the race of mother to the infant rather than using the previous, more complicated algorithm for race of child. This change affects the natality data by race in this chapter. In addition, because live births comprise the denominator of infant mortality (including neonatal and postneonatal), maternal mortality, and fetal death rates, these rates are also affected. These changes are described in greater detail in other NCHS publications (9,10). Quantitatively, the change in the basis for tabulating live births by race results in more births to the white population and fewer births to the black population and other races. Because of changes in the denominators, infant mortality rates (**14.1**), fetal death rates (**14.2**), and maternal mortality rates (**14.3**) under the new classification tend to be lower for white infants and higher for infants of other races than they would be when computed by the previous method. For characteristics of birth such as percent low birthweight (**14.5**) and percent receiving early care (**14.11**), the racial disparities tend to be larger when data are tabulated by race of mother rather than race of child.

The special target populations for racial subgroups in this priority area were monitored with the "new" data by race of mother. Data prior to 1989 were recomputed by race of mother to allow comparable trend comparisons.

Studies indicate that, in the past, infant mortality for minorities other than blacks from the mortality files had been seriously underestimated (11). Therefore, infant mortality (**14.1**) for American Indians/Alaska Natives (AI/AN) and for Puerto Ricans were monitored with data from the Linked Infant Birth and Infant Death Files, which categorizes deaths by the race of mother as reported on the birth certificate. Beginning in 1995, data are based on a period file using weighted data and are not strictly comparable with the unweighted cohort linked file data used for previous years (8). The 1995 weighted infant mortality rates are between less than 1 percent and 5 percent higher than unweighted rates for 1995 (12).

For objective **14.6**, recommended weight gain is the amount of weight gained during pregnancy as recommended in the 1990 National Academy of Sciences' report, Nutrition During Pregnancy.

Data Sources

Data for objective **14.7** come from the National Hospital Discharge Survey (NHDS) maintained by NCHS. Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB–82 and UB–92). A comparison of NHDS data with National Health Interview Survey (NHIS) data for people who reported being hospitalized (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites was roughly 22 percent in 1991; the difference in reporting for blacks was negligible (13).

Data for **14.9** and **14.9a–c** are from the Ross Mothers' Survey (RMS) conducted by Abbot Laboratories. The RMS is an ongoing survey that is periodically mailed to a probability sample of new mothers selected from a list of names that represents approximately 80 percent of all national births. In the RMS, mothers are asked to recall the type of milk their baby was fed in the hospital and in each subsequent month up to the month of the survey. Mothers are considered to be breastfeeding if they used either human milk exclusively or human milk in combination with a supplemental bottled formula or cow's milk. In 1988–96, the questionnaires were mailed to mothers when their babies were 6 months old. In 1997, the methodology changed and questionnaires were mailed to a larger sample of mothers with babies 1–12 months of age. Therefore, although the overall sample is now approximately double the pre–1997 size, the number in the sample for each month (including 6 months) is considerably smaller than that of previous years. This change affects the stability of the 6-month figures now used to monitor this objective. Also beginning with 1997 data, the RMS no longer collects information on family income. Information on education of mother from the survey is available to measure socioeconomic status.

Breastfeeding among AI/AN mothers (**14.9d**) is tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in State and tribal participation could affect the comparability of these data.

Data for objective **14.12** are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on inquiry about preconception counseling represent the proportion of providers who routinely asked 81–100 percent of their patients about family planning. The data on counseling refer to the proportion of providers who routinely counseled 81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Data on fetal alcohol syndrome (FAS) (**14.4**) and spina bifida and other neural tube defects (**14.17**) are by year of birth. Cases received after the end of the data year are assigned to the year of the birth. Therefore, data for previous years include revisions and may differ from those previously published.

The trends for FAS and spina bifida should be interpreted with caution. These data from baseline (1987 and 1990, respectively) through 1993 were obtained from the Birth Defects Monitoring Program (BDMP) from hospitals participating in the Commission on Professional and Hospital Activities (CPHA). The number of participating hospitals has declined substantially in recent years, resulting in a decrease in the proportion of U.S. births covered by the BDMP. In 1981, 24 percent of all births (19 percent of black births) were covered compared with only 5 percent (and only 2 percent of black births) in 1993. As a result, the relatively small number of births in the BDMP may not be representative of all U.S. births. The increasing trend in FAS may also be a function of improved identification and reporting, rather than an actual increase in incidence of the condition. There was not a sufficient number of CPHA hospitals in 1994 to compute a reliable rate for either objective **14.4** or **14.17**. At present, the BDMP no longer exists.

The decreased number of births in the BDMP also made tracking FAS for AI/AN problematic (**14.4a**). In 1993 the BDMP contained only about 500 births (or 1 percent of AI/AN births) to AI/AN mothers compared with 13 percent in 1981. As a result, FAS data beyond 1990 for AI/AN are considered unreliable and are not shown in the table.

In 1996, data from the National Birth Defects Prevention Network (NBDPN) became available and is being used to track objective **14.17**. The NBDPN is a collaborative effort between the Centers for Disease Control and Prevention and more than 30 States to collect comparable population-based birth defect data.

The data on substance use during pregnancy (**14.10**) come from multiple sources. The 1985 baseline data on smoking are from the NHIS and the 1988 baseline data on alcohol, cocaine, and marijuana come from the National Maternal and Infant Health Survey. The 1992 and 1994–98 updates on tobacco are from the information listed on the certificate of live birth and the 1993 updates on all substances are from the National Pregnancy and Health Survey. Although the estimates from these sources are relatively consistent, differences in methodology among the data systems suggest that changes over time should be interpreted with caution.

Proxy Data

Objective 14.13 addresses the percent of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities. The data used to track the objective are the number of pregnant women (per 100 live births) who were screened for alpha-fetoprotein levels for the purpose of detecting babies with fetal Down's syndrome (8).

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Table 14. Maternal and Infant Health objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	14.1 **Infant mortality** (under 1 year per 1,000 live births)	1987	10.1	9.2	8.9	8.5	8.4	8.0	7.6	7.3	7.2	7.2	---	7
	a. Black	1987	18.8	18.0	17.6	16.8	16.5	15.8	15.1	14.7	14.2	14.3	---	11
	b. American Indian/Alaska Native	1984	13.4	13.1	11.3	---	---	---	9.0	10.0	8.7	9.3	---	8.5
	c. Puerto Rican[1]	1984	12.9	9.9	9.7	---	---	---	8.9	8.6	7.9	7.8	---	8
	d. Neonatal mortality (under 28 days per 1,000 live births)	1987	6.5	5.7	5.6	5.4	5.3	5.1	4.9	4.8	4.8	4.8	---	4.5
	e. Neonatal mortality among black	1987	12.3	11.6	11.2	10.8	10.7	10.2	9.8	9.6	9.4	9.5	---	7
	f. Neonatal mortality among Puerto Rican[1]	1984	8.6	6.9	6.1	---	---	---	6.1	5.6	5.4	5.2	---	5.2
	g. Postneonatal mortality (28 days–11 months per 1,000 live births)	1987	3.6	3.4	3.4	3.1	3.1	2.9	2.7	2.5	2.5	2.4	---	2.5
	h. Postneonatal mortality among black infants	1987	6.4	6.4	6.3	6.0	5.8	5.6	5.3	5.1	4.8	4.8	---	4
	i. Postneonatal mortality among American Indian/Alaska Native infants	1984	7.0	7.0	5.8	---	---	---	5.1	5.3	4.2	4.3	---	4
	j. Postneonatal mortality among Puerto Rican infants[1]	1984	4.3	3.0	3.5	---	---	---	2.8	3.0	2.5	2.6	---	2.8
☐	14.2 **Fetal deaths**	1987	7.6	7.5	7.3	7.4	7.1	7.0	7.0	6.9	6.8	6.8	---	5
	(20 weeks or more gestation per 1,000 live births plus fetal deaths)													
	a. Black	1987	13.1	13.3	12.8	13.3	12.8	12.5	12.7	12.5	12.5	12.5	---	7.5
■	14.3 **Maternal mortality** (per 100,000 live births)	1987	6.6	8.2	7.9	7.8	7.5	8.3	7.1	7.6	8.4	7.1	---	3.3
	a. Black	1987	14.9	22.4	18.3	20.8	20.5	18.5	22.1	20.3	20.8	17.1	---	5
■	14.4 **Fetal alcohol syndrome** (per 1,000 live births)	1987	0.22	0.40	0.37	0.52	0.67	---	---	---	---	---	---	0.12
	a. American Indian/Alaska Native	1987	4.0	5.2	---	---	---	---	---	---	---	---	---	2.0
	b. Black	1987	0.8	1.4	1.9	2.3	5.4	---	---	---	---	---	---	0.4
■	14.5 **Low birth weight** (less than 2,500 grams)	1987	6.9%	7.0%	7.1%	7.1%	7.2%	7.3%	7.3%	7.4%	7.5%	7.6%	[P]7.6%	5%
	Very low birth weight (less than 1,500 grams)	1987	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.4%	[P]1.5%	1%
	a. Low birth weight among black infants	1987	13.0%	13.3%	13.6%	13.3%	13.3%	13.2%	13.1%	13.0%	13.0%	13.0%	[P]13.1%	9%
	b. Very low birth weight among black infants	1987	2.8%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.1%	[P]3.1%	2%
	c. Low birth weight among Puerto Rican infants[1]	1990	9.0%	...	9.4%	9.2%	9.2%	9.1%	9.4%	9.2%	9.4%	9.7%	---	6%
	d. Very low birth weight among Puerto Rican infants[1]	1990	1.6%	...	1.7%	1.7%	1.7%	1.6%	1.8%	1.7%	1.8%	1.9%	---	1%
☐	14.6 **Recommended weight gain during pregnancy**	1980	[2,5]68%	[3]75%	---	---	---	---	---	---	---	---	---	85%
▨	14.7 **Severe complications of pregnancy** (per 100 deliveries)	1987	22	18	18	17	15	15	14	14	13	13	---	15
	a. Black	1991	28	...	...	26	24	25	24	23	21	19	---	16
☐	14.8 **Cesarean delivery** (per 100 deliveries)	1987	24.4	23.5	23.5	23.6	22.8	22.0	20.8	21.8	21.5	22.5	---	15
	a. Primary (first time) cesarean delivery	1987	17.4	16.8	17.1	16.8	16.3	15.8	15.5	15.7	15.6	15.6	---	12
	b. Repeat cesarean deliveries (females with previous cesarean delivery)	1987	91.2	79.8	75.8	74.9	74.6	70.3	64.5	66.4	65.6	69.3	---	65
☐	14.9* **Breastfeeding**													
	During early postpartum period[4]	1988	54%	52%	53%	54%	56%	57%	60%	59%	62%	64%	67%	75%
	a. Low-income mothers	1988	[5]34%	35%	33%	35%	38%	40%	42%	42%	46%	47%	49%	75%
	b. Black mothers	1988	25%	23%	26%	28%	31%	33%	37%	37%	41%	45%	50%	75%

See footnotes and key at end of table.

Table 14. Maternal and Infant Health objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	c. Hispanic mothers	1988	51%	48%	52%	52%	56%	58%	61%	61%	64%	66%	69%	75%
	d. American Indian/Alaska Native mothers	1988	47%	47%	46%	53%	51%	44%	52%	54%	56%	57%	62%	75%
	At age 6 months	1988	[5]20%	18%	18%	19%	19%	20%	22%	22%	26%	29%	31%	50%
	a. Low-income mothers	1988	9%	8%	8%	9%	10%	10%	11%	12%	20%	21%	20%	50%
	b. Black mothers	1988	[5]7%	6%	7%	8%	9%	10%	11%	11%	15%	19%	20%	50%
	c. Hispanic mothers	1988	[5]14%	13%	15%	16%	16%	18%	20%	20%	25%	28%	29%	50%
	d. American Indian/Alaska Native mothers	1988	28%	27%	22%	24%	28%	24%	24%	24%	25%	26%	27%	50%
☐	14.10 **Abstinence from alcohol, tobacco, and drug use during pregnancy**													
	Tobacco	1985	75%	79%	80%	83%	80%	85%	86%	86%	87%	87%	- - -	90%
	Alcohol	1988	79%	- - -	- - -	- - -	81%	- - -	- - -	- - -	- - -	- - -	- - -	95%
	Cocaine	1988	99%	- - -	- - -	- - -	99%	- - -	- - -	- - -	- - -	- - -	- - -	100%
	Marijuana	1988	98%	- - -	- - -	- - -	97%	- - -	- - -	- - -	- - -	- - -	- - -	100%
☐	14.11 **Prenatal care in the first trimester** (percent of live births)	1987	76.0%	75.8%	76.2%	77.7%	78.9%	80.2%	81.3%	81.9%	82.5%	82.8%	[P]83.2%	90%
	a. Black	1987	60.8%	60.6%	61.9%	63.9%	66.0%	68.3%	70.4%	71.4%	72.3%	73.3%	[P]74.0%	90%
	b. American Indian/Alaska Native	1987	57.6%	57.9%	59.9%	62.1%	63.4%	65.2%	66.7%	67.7%	68.1%	68.8%	- - -	90%
	c. Hispanic[1]	1987	61.0%	60.2%	61.0%	64.2%	66.6%	68.9%	70.8%	72.2%	73.7%	74.3%	[P]74.5%	90%
☐	14.12* **Age-appropriate preconception counseling by clinicians**	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
	Percent of clinicians routinely providing service to 81–100% of patients.													
	Inquiry about family planning (female, childbearing age)													
	Pediatricians	1992	18%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Nurse practitioners	1992	53%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5]42%	- - -	60%
	Obstetricians/gynecologists	1992	48%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Internists	1992	24%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Family physicians	1992	28%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Counseling about family planning													
	Pediatricians	1992	36%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Nurse practitioners	1992	53%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5]40%	- - -	60%
	Obstetricians/gynecologists	1992	65%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Internists	1992	26%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
	Family physicians	1992	36%	...	...	...	- - -	- - -	- - -	- - -	- - -	[5,6]- - -	- - -	60%
☐	14.13 **Screening for fetal abnormalities (percent of live births)**	1988	29%	- - -	- - -	51%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90%
☐	14.14 **Pregnant women and infants receiving risk-appropriate care**	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90%
☐	14.15 **Newborn screening and treatment**													
	Screened by State-sponsored programs for genetic disorders and other conditions	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	95%
	Testing positive for disease and receiving appropriate treatment	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	90%

See footnotes and key at end of table.

Table 14. Maternal and Infant Health objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Sickle cell anemia screening	1987	[7]33%	[8]89%	---	---	---	---	---	---	---	---	---	90%
		Black infants	1987	[7]57%	[9]77%	---	---	---	---	---	---	---	---	---	95%
		Galactosemia screening (38 States)	1987	70%	97%	---	---	---	---	---	---	---	---	---	95%
		Newborns diagnosed positive for sickle cell anemia receiving treatment	...	---	95%	---	---	---	---	---	---	---	---	---	90%
		Newborns diagnosed positive for galactosemia receiving treatment	...	---	100%	---	---	---	---	---	---	---	---	---	95%
☐	14.16	**Babies receiving primary care**	...	---	---	---	---	---	---	---	---	---	---	---	90%
☐	14.17	**Spina bifida and other neural tube defects** (per 10,000 live births)	1990	6	...	7	6	7	---	---	6	---	---	---	3

--- Data not available.
... Category not applicable.
[b]Baseline has been revised.
[p]Preliminary data.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

[1]Excludes data from States lacking an Hispanic-origin item on their birth or death certificate or for which Hispanic-origin data were not of sufficient quality.
[2]1980 data for married females who had a full-term live birth and prenatal care.
[3]1988 data.
[4]Breastfed in hospital.
[5]1997–98 data.
[6]Response rate for this group was too low to produce reliable estimates.
[7]Based on 20 States reporting.
[8]Based on 43 States reporting.
[9]Based on 9 States reporting.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	Data source
14.1, 14.1a–j	National Vital Statistics System, CDC, NCHS.
14.2, 14.2a	National Vital Statistics System, CDC, NCHS.
14.3, 14.3a	National Vital Statistics System, CDC, NCHS.
14.4, 14.4a, b	Birth Defects Monitoring Program, CDC, NCEH.
14.5, 14.5a–d	National Vital Statistics System, CDC, NCHS.
14.6	Baseline: National Natality Survey, CDC, NCHS. Update: National Maternal and Infant Health Survey, CDC, NCHS.
14.7	National Hospital Discharge Survey, CDC, NCHS.
14.8, 14.8a, b	National Hospital Discharge Survey, CDC, NCHS.
14.9*, 14.9a–c	Ross Laboratories Mother Survey.
14.9d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
14.10	Baseline: National Maternal and Infant Health Survey, CDC, NCHS. 1992 and 1994–98 updates: National Vital Statistics System, CDC, NCHS. 1993 updates: National Pregnancy and Health Survey, NIH, NIDA.
14.11, 14.11a–c	National Vital Statistics System, CDC, NCHS.
14.12*	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.

Objective number	*Data source*
14.13	College of American Pathologists, Foundation for Blood Research.
14.15	Council of Regional Networks for Genetic Services.
14.17	Birth Defects Monitoring Program, CDC, NCEH. 1996 update: National Birth Defects Prevention Network, CDC, NCEH.

* Duplicate objective. See full text of objective following this table.

Maternal and Infant Health Objectives

14.1: Reduce the infant mortality rate to no more than 7 per 1,000 live births.

14.1a: Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.

14.1b: Reduce the infant mortality rate among American Indians and Alaska Natives to no more than 8.5 per 1,000 live births.

14.1c: Reduce the infant mortality rate among Puerto Ricans to no more than 8 per 1,000 live births.

14.1d: Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.

14.1e: Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births.

14.1f: Reduce the neonatal mortality rate among Puerto Ricans to no more than 5.2 per 1,000 live births.

14.1g: Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.

14.1h: Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births.

14.1i: Reduce the postneonatal mortality rate among American Indians and Alaska Natives to no more than 4 per 1,000 live births.

14.1j: Reduce the postneonatal mortality rate among Puerto Ricans to no more than 2.8 per 1,000 live births.

14.2: Reduce the fetal death rate (20 or more weeks of gestation) to no more than 5 per 1,000 live births plus fetal deaths.

14.2a: Reduce the fetal death rate (20 or more weeks of gestation) among blacks to no more than 7.5 per 1,000 live births plus fetal deaths.

14.3: Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births.

14.3a: Reduce the maternal mortality rate among black women to no more than 5 per 100,000 live births.

14.4: Reduce the incidence of fetal alcohol syndrome to no more than 0.12 per 1,000 live births.

14.4a: Reduce the incidence of fetal alcohol syndrome among American Indians and Alaska Natives to no more than 2 per 1,000 live births.

14.4b: Reduce the incidence of fetal alcohol syndrome among blacks to no more than 0.4 per 1,000 live births.

14.5: Reduce low birthweight to an incidence of no more than 5 percent of live births and very low birthweight to no more 1 percent of live births.

14.5a: Reduce low birthweight among blacks to an incidence of no more than 9 percent of live births.

14.5b: Reduce very low birthweight among blacks to no more 2 percent of live births.

14.5c: Reduce low birthweight among Puerto Ricans to an incidence of no more than 6 percent of live births.

14.5d: Reduce very low birthweight among Puerto Ricans to no more 1 percent of live births.

14.6: Increase to at least 85 percent the proportion of mothers who achieve the minimum recommended weight gain during their pregnancies.

14.7: Reduce severe complications of pregnancy to no more than 15 per 100 deliveries.

14.7a: Reduce severe complications of pregnancy among blacks to no more than 16 per 100 deliveries.

14.8: Reduce the cesarean delivery rate to no more than 15 per 100 deliveries.

14.8a: Reduce the primary (first time) cesarean delivery rate to no more than 12 per 100 deliveries.

14.8b: Reduce the repeat cesarean delivery rate to no more than 65 per 100 deliveries among women who had a previous cesarean delivery.

14.9*: Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11

14.9a*: Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11a

14.9b*: Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11b

14.9c*: Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11c

14.9d*: Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11d

14.10: Increase abstinence from tobacco use by pregnant women to at least 90 percent, increase abstinence from alcohol by pregnant women to at least 90 percent and increase abstinence from cocaine and marijuana to 100 percent.

14.11: Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

14.11a: Increase to at least 90 percent the proportion of pregnant black women who receive prenatal care in the first trimester of pregnancy.

14.11b: Increase to at least 90 percent the proportion of pregnant American Indian and Alaska Native women who receive prenatal care in the first trimester of pregnancy.

14.11c: Increase to at least 90 percent the proportion of pregnant Hispanic women who receive prenatal care in the first trimester of pregnancy.

14.12*: Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 5.10

14.13: Increase to at least 90 percent the proportion of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities.

14.14: Increase to at least 90 percent the proportion of pregnant women and infants who receive risk-appropriate care.

14.15: Increase to at least 95 percent the proportion of newborns screened by State-sponsored programs for genetic disorders and other disabling conditions and to 90 percent the proportion of newborns testing positive for disease who receive appropriate treatment.

14.16: Increase to at least 90 percent the proportion of babies aged 18 months and younger who receive recommended primary care services at the appropriate intervals.

14.17: Reduce the incidence of spina bifida and other neural tube defects to 3 per 10,000 live births.

*Duplicate objective.

Priority Area 15 Heart Disease and Stroke

Background

One of the most important public health achievements of the 20th century has been the decline in age-adjusted mortality rates from cardiovascular disease (CVD). Between 1950 and 1999, the age-adjusted death rate from CVD declined 60 percent (1). Despite this dramatic improvement, an estimated 60 million Americans have CVD, with more than 950,000 Americans dying from the illness each year. On the whole, CVD accounts for more than 40 percent of all U.S. deaths (2). Heart disease and stroke, the two main components of CVD, are the first and third leading causes of death, respectively (3). Heart disease and stroke continue to be major causes of premature, permanent disability among working adults (4); stroke alone accounts for disability among more than 1 million people nationwide. The economic cost and lost productivity attributed to CVD was $327 billion in 2000 (5). Coronary heart disease (CHD) accounts for the largest proportion of heart disease, with about 12 million people affected (5). The age-adjusted death rates, which peaked in the mid-1960s, declined 60 percent for CHD and 66 percent for stroke between 1963 and 1998. However, recent age-adjusted rates suggest a slowing in the rate of decline for CHD mortality and a leveling for stroke mortality (6). Historically, the age-adjusted death rates for both CHD and stroke have been higher for African Americans than for the total U.S. population. Recent data show that the overall decline in CHD death rates between 1987 and 1998 was not as large in the African American population; however, there was a narrowing of the disparity observed in the stroke death rates for African Americans over this period.

Data Summary

Highlights

Progress has been made in reducing mortality from CVD. Between 1987 and 1998, the age-adjusted death rate for CHD (**15.1**) declined 28 percent, surpassing the year 2000 target in 1998 with a rate of 97 deaths per 100,000 persons. The age-adjusted mortality rate for stroke (**15.2**) declined 17 percent to 25.1 deaths per 100,000 persons in 1998.

Detection and treatment of CVD risk factors, especially high blood pressure and high blood cholesterol, have contributed significantly to the decline in CHD and stroke death rates (7,8). The prevalence of high blood pressure has declined from 39.7 percent of adults 20–74 years of age (1976–80), to 23.1 percent (1988–94) (9). The percent of persons with hypertension whose blood pressure was controlled (**15.4**) increased from 11 percent to 23 percent during the same time period. Furthermore, the mean serum cholesterol level (**15.6**) fell from 213 mg/dL in 1976–80 to 203 mg/dL in 1988–94 and the percent of persons with high blood cholesterol (**15.7**) fell from 27 to 19, below the year 2000 target set at 20 percent.

Prevention research studies have shown benefits from engaging in preventive health and health promotion behaviors such as quitting smoking and being physically active (10,11). The percent of adults 18 years of age and over who were current smokers (**15.12**) fell from 29 percent in 1987 to 24 percent in 1998. Participation in moderate physical activity (**15.11**) five or more times per week increased over the decade, meeting the year 2000 target of 30 percent, whereas the proportion of adults participating in physical activity seven or more times per week moved toward, but did not meet the 30 percent target. Even so, overweight prevalence (**15.10**) remains a major public health challenge, with the percent of overweight American adults increasing from 26 percent in 1976–80 to 35 percent in 1988–94. A similar trend has been observed among all gender and racial groups and across regions (12). Another concern is end-stage renal disease (ESRD). The death rate for ESRD (**15.3**) increased from 14.4 deaths per 100,000 persons at baseline (1987) to 32 per 100,000 in 1998, moving away from the target of 13 per 100,000.

Summary of Progress

Of the 17 objectives in the Heart Disease and Stroke Priority Area, 3 objectives (**15.1**, **15.7**, and **15.8**) either met or exceeded their year 2000 targets. Data for 12 objectives (**15.2**, **15.4–15.6**, **15.9**, and **15.11–15.17**) show improvements toward their respective year 2000 targets, while the remaining two objectives (**15.3** and **15.10**) have moved away from their targets. See table 15 for the tracking data for the objectives in this priority area and figure 15 for a quantitative assessment of progress.

Discussion

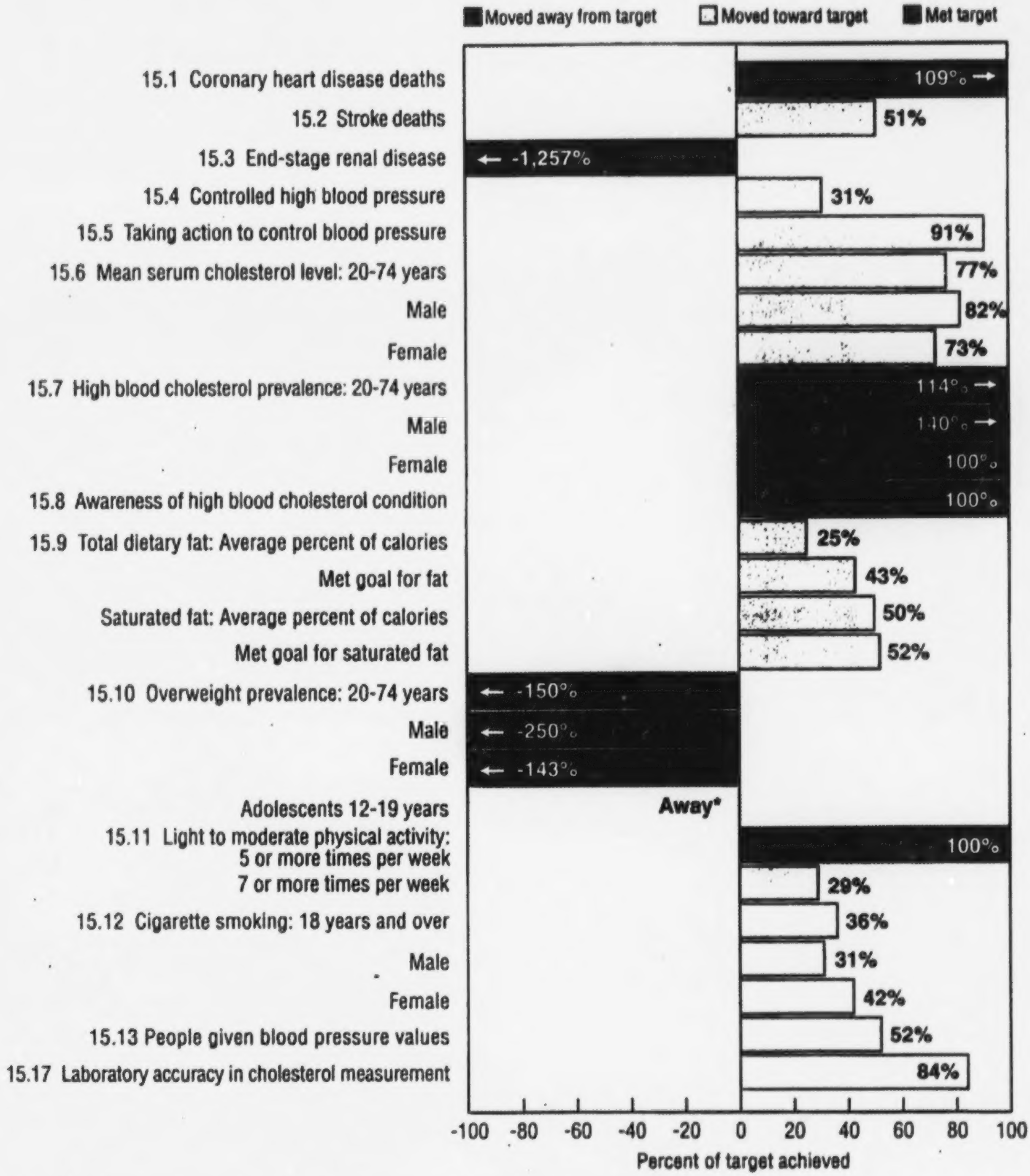
Reasons for the declines in heart disease and stroke may vary by region of the country, socioeconomic status, and population demographics (that is, age, sex, and racial/ethnic group). Prevention efforts and improvements in early detection, treatment, and care have resulted in a number of beneficial trends, which may have contributed to declines in heart disease and stroke. These trends include a decline in cigarette smoking, decrease in mean blood pressure levels, increase in controlled hypertension, decrease in mean blood cholesterol levels, and improved medical care (1).

In addition to clinical interventions, public health outreach and education programs and media campaigns (13–15), may have contributed significantly to increasing treatment and control of high blood pressure, increasing awareness of high blood cholesterol, and decreasing prevalence of high blood cholesterol.

Efforts to promote early identification and treatment of patients with a heart attack and implementation interventions to prevent recurrence of cardiovascular events have also likely had a significant impact on improving CVD-related outcomes. Nevertheless, there are still major challenges that lie ahead.

The alarming trend in the prevalence of overweight may be associated with environmental and lifestyle changes that occurred in the United States during this period, including the availability of more food and food with higher energy content, unhealthy eating habits, and diminished opportunities in daily life to burn energy (16). In addition, the increase in overweight may also be associated with the finding that only about 10 percent of office visits included counseling directed toward weight reduction, 19 percent of visits included counseling for physical activity, and 23 percent included dietary counseling (17).

Figure 15. Final status of Heart Disease and Stroke objectives



*This objective has moved away from its target. A progress quotient could not be calculated.

NOTE: Complete tracking data are shown in table 15. Progress quotients are not calculated for objectives 15.14, 15.15 and 15.16. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

The higher ESRD death rate may be associated with complications from prolonged periods of undiagnosed hypertension or type 2 diabetes (18). Screening for, and aggressive treatment of, hypertension and hyperglycemia are likely interventions to reduce the incidence of ESRD and subsequent death.

Transition to *Healthy People 2010*

Like the preceding *Healthy People 2000* Heart Disease and Stroke chapter, the *Healthy People 2010* focus area addresses broad issues related to CVD and stroke, and the associated modifiable risk factors of high blood pressure and high blood cholesterol. The *Healthy People 2010* goal of improving cardiovascular health and quality of life through the prevention of the development of risk factors; detection, and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent cardiovascular events, builds on the detection, evaluation, and management focus of *Healthy People 2000*. There is also an expanded focus on reducing cardiovascular- and stroke-related health disparities among racial, ethnic, and geographic populations, as well as an emphasis on the critical need for new, innovative science-based prevention methods that can be widely disseminated and utilized by professionals, patients, and the public in general.

As in *Healthy People 2000*, *Healthy People 2010* also highlights related objectives focusing on key components (for example, risk factors, health/medical services, community outreach, effective communication) to the prevention, detection, and treatment of heart disease and stroke. These objectives can be found in the chapters on Access to Quality Health Services, Chronic Kidney Disease, Educational and Community-Based Programs, Health Communication, Nutrition and Overweight, Physical Activity and Fitness, Public Health Infrastructure, and Tobacco Use.

However, there are differences between the two chapters. Several of the 17 objectives that were in *Healthy People 2000* were not carried over to *Healthy People 2010*. A total of nine objectives were either moved to other chapters (**15.9**, **15.10**, **15.11**, and **15.16**) or dropped from the *Healthy People 2010* initiative (**15.3**, **15.8**, **15.12**, **15.15**, and **15.17**). The eight remaining objectives from *Healthy People 2000* were combined with eight new objectives in *Healthy People 2010*, created to address the four components of the overall goal for heart disease and stroke. The new objectives include knowledge of symptoms of heart attack and importance of calling 9-1-1, artery-opening therapy, bystander response to cardiac arrest, out-of-hospital emergency cardiac care, heart failure hospitalizations, knowledge of early warning signs of stroke, high blood pressure prevalence, and LDL-cholesterol level in CHD patients. With the exception of two objectives (heart failure hospitalizations and high blood pressure prevalence), all are developmental objectives (currently lack baseline data).

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

Definitions

Coronary heart disease deaths (**15.1**) are defined by ICD–9 codes 402, 410–414, and 429.2. These are different from the codes used to define the category "Diseases of heart," which often appears in published tables (see Appendix table IV).

Objective **15.4** addresses the proportion of people with hypertension whose blood pressure is under control. High blood pressure is defined as blood pressure greater than or equal to 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as maintaining a blood pressure less than 140 mm HG systolic and 90 mm Hg diastolic through the use of antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

Objective **15.5**, to increase the proportion of people with hypertension who are taking action to control their blood pressure, is measured by self-reported data from the National Health Interview Survey (NHIS). In this survey, people with high blood pressure are defined as those who report that they have been told they have high blood pressure on two or more occasions by a doctor or health professional. People with high blood pressure were considered to be taking action if they report that they were told either to take blood pressure medication, diet to lose weight, cut down on salt, or exercise. High blood cholesterol (**15.7**) is defined as serum cholesterol levels of 240 mg/dL or higher (19).

Overweight (**15.10**) for adults is defined as a body mass index (BMI) of 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II. Current international research indicates that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease (20,21). See the Nutrition chapter (Priority Area 2) for additional information.

Beginning in 1992, the definition of current smoker (**15.12**) was modified to specifically include persons who smoked only "some days." Prior to 1992, a current smoker was defined by the questions "Have you ever smoked 100 cigarettes in your lifetime?" and "Do you smoke now?" In 1992, cigarette smoking data were collected for a half-sample of the National Health Interview Survey with half the respondents (one-quarter sample) using these two smoking questions and the other half of respondents (one-quarter sample) using a revised smoking question: "Do you smoke everyday, some days, or not at all?" in place of the second question. The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

Objective **15.15** seeks to increase the proportion of primary care providers who provide appropriate therapy for high blood cholesterol. This objective was tracked by the median blood cholesterol level at initiation of diet and drug therapy. In 1990, 54 percent of physicians reported that they initiate diet therapy and 60 percent initiate drug therapy at these median levels.

Data Comparability

Overweight (**15.10**) was tracked with two data sources. The primary data source was NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source was NHIS. This survey provides interim estimates shown in an earlier publication (22), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES; prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective **15.11** (light-to-moderate physical activity) was tracked with the NHIS. The list of activities asked for on the NHIS was not identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years and over; thus, the data shown are for people 18–64 years of age. The 1991, 1995, and 1998 surveys asked about some different activities than the previous surveys, but people of all age groups were asked the same questions. Because of these differences, 1985 and 1990 data are not comparable to later data. (See Priority Area 1 for more information.)

Objective **15.13** addresses blood pressure screening and whether people know if their blood pressure is normal or high. Baseline data and 1990 updates show the proportion of people 18 years of age and over who had their blood pressure measured within the preceding 2 years by a health professional or other trained observer and who were given the diastolic and systolic values of the measure. The 1991, 93, 94, and 98 updates are the proportion of people 18 years of age and over who had their blood pressure checked and can state whether their blood pressure was high, low, borderline, or normal.

The 1985 and 1992 data for objective **15.16** are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites of 50 or more employees. Worksites were sampled, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update comes from the Centers for Disease Control and Prevention-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey but did not include passive methods of health promotion (23,24).

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Table 15. Heart Disease and Stroke objectives

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
■	15.1*	**Coronary heart disease deaths** (age adjusted per 100,000)	1987	135	22	118	114	114	110	108	105	100	97	---	100
		a. Black	1987	168	158	156	151	154	147	147	140	136	133	---	115
☐	15.2*	**Stroke deaths** (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	25.9	25.1	---	20.0
		a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	42.5	41.4	---	27.0
■	15.3	**End-stage renal disease** (per 100,000)	1987	14.4	19.2	21.4	23.4	24.1	28.8	27.8	28.7	30.8	32.0	---	13.0
		a. Black	1987	34.0	47.8	52.7	57.2	59.5	69.6	69.1	71.5	72.3	75.4	---	30.0
☐	15.4*	**Controlled high blood pressure**													
		People with high blood pressure 18–74 years	1976–80	11%	---	---	---	---	[1]23%	---	---	---	---	---	50%
		a. Males with high blood pressure 18–74 years	1976–80	6%	---	---	---	---	[1]17%	---	---	---	---	---	40%
		b. Mexican Americans with high blood pressure 18–74 years	1988–94	[5]14%	...	...	...	...	...	---	---	---	---	---	50%
		c. Females with high blood pressure 70 years and over	1988–94	[5]19%	...	...	...	...	...	---	---	---	---	---	50%
☐	15.5	**Taking action to control blood pressure**													
		People with high blood pressure 18 years and over	1985	79%	80%	---	---	---	87%	---	---	---	89%	---	90%
		a. White hypertensive male 18–34 years	1985	51%	54%	---	---	---	64%	---	---	---	57%	---	80%
		b. Black hypertensive male 18–34 years	1985	63%	56%	---	---	---	70%	---	---	---	67%	---	80%
☐	15.6*	**Mean serum cholesterol level (mg/dL)**													
		People 20–74 years	1976–80	213	---	---	---	---	[1]203	---	---	---	---	---	200
		Male 20–74 years	1976–80	211	---	---	---	---	[1]202	---	---	---	---	---	200
		Female 20–74 years	1976–80	215	---	---	---	---	[1]204	---	---	---	---	---	200
■	15.7*	**High blood cholesterol prevalence**													
		People 20–74 years	1976–80	27%	---	---	---	---	[1]19%	---	---	---	---	---	20%
		Male 20–74 years	1976–80	25%	---	---	---	---	[1]18%	---	---	---	---	---	20%
		Female 20–74 years	1976–80	29%	---	---	---	---	[1]20%	---	---	---	---	---	20%
■	15.8	**Awareness of high blood cholesterol condition**													
		Adults 18 years and over with high blood cholesterol	1988	30%	44%	---	---	---	---	60%	---	---	---	---	60%
☐	15.9*	**Dietary fat intake among people 2 years and over**[2]													
		National Health and Nutrition Examination Survey													
		Average percent of calories from total fat	1976–80	[3]36%	---	---	---	---	[1]34%	---	---	---	---	---	30%
		Average percent of calories from saturated fat	1976–80	[3]13%	---	---	---	---	[1]12%	---	---	---	---	---	10%
		Percent who met goal for total fat	1988–94	[5]27%	...	...	...	...	...	---	---	---	---	---	50%
		Percent who met goal for saturated fat	1988–94	[5]29%	...	...	...	...	...	---	---	---	---	---	50%
		Continuing Survey of Food Intakes by Individuals													
		Average percent of calories from total fat	1989–91	34%	...	...	---	---	33%	33%	33%	---	---	---	30%
		Average percent of calories from saturated fat	1989–91	12%	...	...	---	---	11%	11%	11%	---	---	---	10%
		Percent who met goal for total fat	1989–91	22%	...	...	---	---	32%	33%	34%	---	---	---	50%
		Percent who met goal for saturated fat	1989–91	21%	...	...	---	---	34%	35%	36%	---	---	---	50%

See footnotes and key at end of table.

Table 15. Heart Disease and Stroke objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	15.10* **Overweight prevalence** (based on measured height and weight unless otherwise indicated)													
	Adults 20–74 years	1976–80	26%	---	---	---	---	[1,4]35%	---	---	---	---	---	20%
	Male	1976–80	24%	---	---	---	---	[1,4]34%	---	---	---	---	---	20%
	Female	1976–80	27%	---	---	---	---	[1,4]37%	---	---	---	---	---	20%
	Adolescents 12–19 years	1976–80	15%	---	---	---	---	[1]24%	---	---	---	---	---	15%
	a. Low-income female 20–74 years	1976–80	37%	---	[5]47%	---	---	---	---	---	---	---	---	25%
	b. Black female 20–74 years	1976–80	44%	---	---	---	---	[1,4]52%	---	---	---	---	---	30%
	c. Hispanic female 20–74 years	. . .	---	---	---	---	---	---	---	---	---	---	---	25%
	Hispanic female 20 years and over (self-reported)	. . .	---	33%	32%	32%	33%	32%	35%	---	[‡]44%	[‡]46%	---	. . .
	Mexican American female 20–74 years	1982–84	39%	---	---	---	---	[1,4]50%	---	---	---	---	---	. . .
	Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	---	---	. . .
	Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	---	---	. . .
	d. American Indian/Alaska Native 20 years and over	1984–88	29–75%	---	[6]40%	[6]36%	[6]48%	[6]34%	[6]43%	---	[‡,6]46%	[‡,6]45%	---	30%
	e. People with disabilities 20 years and over (self-reported)	1985	36%	---	38%	37%	38%	38%	40%	---	---	---	---	25%
	f. Females with high blood pressure 20–74 years	1976–80	50%	---	---	---	---	---	---	---	---	---	---	41%
	g. Males with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	---	---	35%
	h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	[1,4]37%	---	---	---	---	---	25%
☐	15.11* **Light-to-moderate physical activity**													
	People 6 years and over	. . .	---	---	---	---	---	---	---	---	---	---	---	30%
	People 18 years and over													
	5 or more times per week	1985	[7]22%	[7]23%	[8]24%	---	---	---	23%	---	---	30%	---	30%
	7 or more times per week	1985	[7]16%	[7]16%	[8]17%	---	---	---	16%	---	---	20%	---	30%
	a. Hispanic 18 years and over 5 or more times per week	1991	20%	. . .	. . .	---	---	---	22%	---	---	29%	---	25%
☐	15.12* **Cigarette smoking prevalence**													
	People 18 years and over	1987	29%	25%	26%	[9]27%	25%	26%	25%	---	[‡]25%	[‡]24%	---	15%
	Male	1987	31%	28%	28%	[9]29%	28%	28%	27%	---	[‡]28%	[‡]26%	---	15%
	Female	1987	27%	23%	23%	[9]25%	22%	23%	23%	---	[‡]22%	[‡]22%	---	15%
	a. People with high school education or less 20 years and over	1987	34%	31%	31%	[9]32%	30%	31%	30%	---	[‡]31%	[‡]31%	---	20%
	b. Blue-collar workers 18 years and over	1987	41%	36%	36%	[9]36%	34%	39%	36%	---	[‡]37%	[‡]36%	---	20%
	c. Military personnel	1988	42%	---	---	[9]35%	---	---	32%	---	---	30%	---	20%
	d. Black 18 years and over	1987	33%	26%	29%	[9]28%	26%	27%	26%	---	[‡]27%	[‡]25%	---	18%
	e. Hispanic 18 years and over	1987	24%	23%	20%	[9]21%	20%	20%	18%	---	[‡]20%	[‡]19%	---	15%
	f. American Indian/Alaska Native 18 years and over	1979–87	[10]42–70%	38%	31%	[9]40%	39%	40%	35%	---	[‡]32%	[‡]37%	---	20%
	g. Southeast Asian male	1984–88	55%	[11]35%	[11]36–41	---	---	---	---	---	---	---	---	20%
	h. Females of reproductive age (18–44 years)	1987	29%	26%	27%	[9]28%	26%	27%	26%	---	[‡]26%	[‡]25%	---	12%
	i. Pregnant females	1985	25%	19%	20%	---	20%	---	18%	14%	13%	13%	---	10%
	j. Females who use oral contraceptives	1983	36%	[12]26%	---	---	---	---	24%	---	---	---	---	10%

Table 15. Heart Disease and Stroke objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	15.13	**Knowledge of blood pressure values**													
		People given blood pressure values	1985	61%	76%	---	---	---	---	---	---	---	---	---	90%
		People who can state blood pressure is high, low, or normal	...	---	---	84%	---	85%	84%	---	---	---	85%	---	...
		a. Mexican American male 18 years and over	1991	69%	...	...	---	68%	68%	---	---	---	62%	---	90%
☐	15.14	**Blood cholesterol checked in past 5 years**													
		People 18 years and over	1993	68%	...	...	...	...	---	---	---	---	67%	---	75%
		Ever checked	1988	59%	65%	63%	---	71%	---	75%	---	---	72%	---	...
		Within past 2 years	1988	52%	---	50%	---	54%	---	---	---	---	57%	---	...
		Ever checked													
		a. Black 18 years and over	1991	56%	...	...	---	68%	---	---	---	---	67%	---	75%
		b. Mexican American 18 years and over	1991	42%	...	...	---	55%	---	---	---	---	48%	---	75%
		c. American Indian/Alaska Native 18 years and over	1991	46%	...	...	---	60%	---	---	---	---	53%	---	75%
		Within past two years													
		d. Mexican American 18 years and over	1991	33%	...	...	---	38%	---	---	---	---	38%	---	75%
		e. American Indian/Alaska Native 18 years and over	1991	38%	...	...	---	50%	---	---	---	---	42%	---	75%
		f. Asians/Pacific Islander 18 years and over	1991	45%	...	...	---	44%	---	---	---	---	54%	---	75%
☐	15.15	**Primary care providers who provide appropriate therapy for high blood cholesterol**	...	---	---	---	---	---	---	---	---	---	---	---	75%
		Median cholesterol level when diet therapy is initiated (mg/dL)	1986	240–259	200–219	---	---	---	---	200–219	---	---	---	---	...
		Median cholesterol level when drug therapy is initiated (mg/dL)	1986	300–319	240–259	---	---	---	---	240–259	---	---	---	---	...
☐	15.16	**Worksite blood pressure/cholesterol education programs**													
		High blood pressure and/or cholesterol activity	1992	35.0%	...	...	...	---	---	---	---	---	---	---	50%
		High blood pressure activity	1985	16.5%	---	---	[13]29%	---	---	---	---	---	---	---	...
		Nutrition education activity	1985	16.8%	---	---	31%	---	---	---	---	---	---	---	...
		Blood pressure screening	...	---	---	---	32%	---	---	16%	---	---	---	---	...
☐	15.17	**Laboratory accuracy in cholesterol measurement**	1985	53%	[14]84%	---	---	---	---	---	---	---	---	---	90%

--- Data not available.

... Category not applicable.

Final objective status: ☐ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

[§] Baseline has been revised.

[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.

[1] 1988–94 data.

[2] Estimates are from 1-, 2-, or 3-day dietary data.

[3] For people 2–74 years.

[4] People 20 years and over.

[5] 1988–91 data.

[6] Estimate derived from self-reported height and weight.

[7] Data are for people 18–64 years of age.

[8] Operational definition changed from previous tracking data.

[9] In 1992, the definition of "current" changed to include "some days" (intermittent smoking).
[10] Estimates for different tribes.
[11] Vietnamese males only.
[12] 1988 data.
[13] Includes classes, individual counseling, and resource materials.
[14] 1987 data.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
15.1*, 15.1a	National Vital Statistics System, CDC, NCHS.
15.2*, 15.2a	National Vital Statistics System, CDC, NCHS.
15.3, 15.3a	United States Renal Data System, NIH.
15.4*, 15.4a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
15.5, 15.5a, b	National Health Interview Survey, CDC, NCHS.
15.6*	National Health and Nutrition Examination Survey, CDC, NCHS.
15.7*	National Health and Nutrition Examination Survey, CDC, NCHS.
15.8	Baseline: Health and Diet Survey, FDA.
	Update: Cholesterol Awareness Survey, NIH, NHLBI.
15.9*	1976–80 baselines and 1988–94 data: National Health and Nutrition Examination Survey, CDC, NCHS.
	1989–91 baselines and 1994–96 updates: Continuing Survey of Food Intakes by Individuals, USDA.
15.10*, 15.10a, b, f, g	National Health and Nutrition Examination Survey, CDC, NCHS.
15.10c, h	Data for Hispanic: National Health Interview Survey, CDC, NCHS.
	Baseline for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
15.10d	Baseline: IHS, OPEL.
	Updates: National Health Interview Survey, CDC, NCHS.
15.10e	National Health Interview Survey, CDC, NCHS.
15.11*, 15.11a	National Health Interview Survey, CDC, NCHS.
15.12*, 15.12a, b, d, e, h	National Health Interview Survey, CDC, NCHS.
15.12c	Baseline, 1992, and 1995 updates: Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
	1998 update: DoD Survey of Health Related Behaviors, Research Triangle Institute.
15.12f	Baseline: CDC, 1987.
	Updates: National Health Interview Survey, CDC, NCHS.
15.12g	Baseline: Local surveys.
	1990 update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. Western J of Med 153:34–9. 1990.
	1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporations. JAMA 227(21):1726-31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. AJPH 87(6):1031–4. 1997.
15.12i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS.
	1993 update: National Health and Pregnancy Survey, NIH, NIDA.
	1995 update: National Survey of Family Growth, CDC, NCHS.
	1996–98 updates: National Vital Statistics System, CDC, NCHS.
15.12j	1983 and 1988 data: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
	1995 update: National Survey of Family Growth, CDC, NCHS.
15.13	National Health Interview Survey, CDC, NCHS.

Objective number	*Data source*
15.14	Baseline: Health and Diet Survey, FDA. 1991 and 1993 updates: National Health Interview Survey, CDC, NCHS. 1995 update: Cholesterol Awareness Survey, NIH, NHLBI.
15.15	Cholesterol Awareness Physicians Survey, NIH, NHLBI.
15.16	1985 and 1992 data: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
15.17	Comprehensive Chemistry Survey of Laboratories Using Enzymatic Methods, College of American Pathologists.

* Duplicate objective. See full text of objective following this table.

Heart Disease and Stroke Objectives

15.1*: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 3.1

15.1a*: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 2.1a, and 3.1a

15.2*: Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 2.22 and 3.18

15.2a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 2.22a and 3.18a

15.3: Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) to attain an incidence of no more than 13 per 100,000.

15.3a: Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) among black persons to attain an incidence of no more than 30 per 100,000.

15.4*: Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26

15.4a*: Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26a

15.4b*: Increase to at least 50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26b

15.4c*: Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26c

15.5: Increase to at least 90 percent the proportion of people with high blood pressure who are taking action to help control their blood pressure.

15.5a: Increase to at least 80 percent the proportion of white hypertensive men aged 18–34 who are taking action to help control their blood pressure.

15.5b: Increase to at least 80 percent the proportion of black hypertensive men aged 18–34 who are taking action to help control their blood pressure.

15.6*: Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

Duplicate objective: 2.27

15.7*: Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 2.25

15.8: Increase to at least 60 percent the proportion of adults with high blood cholesterol who are aware of their condition and are taking action to reduce their blood cholesterol to recommended levels.

15.9*: Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 2.5 and 16.7

15.10*: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

Duplicate objectives: 1.2, 2.3, and 17.12

15.10a*: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 17.12a

15.10b*: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 17.12b

15.10c*: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 17.12c

15.10d*: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 17.12d

15.10e*: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 17.12e

15.10f*: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 2.3f, and 17.12f

15.10g*: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 2.3g, and 17.12g

15.10h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 17.12h

15.11*: Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light-to-moderate physical activity for at least 30 minutes per day.

Duplicate objectives: 1.3 and 17.13

15.11a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 17.13a

15.12*: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 3.4 and 16.6

15.12a*: Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 16.6a

15.12b*: Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 18 and older.

Duplicate objectives: 3.4b and 16.6b

15.12c*: Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 16.6c

15.12d*: Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.

Duplicate objectives: 3.4d and 16.6d

15.12e*: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.

Duplicate objectives: 3.4e and 16.6e

15.12f*: Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 16.6f

15.12g*: Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 16.6g

15.12h*: Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 16.6h

15.12i*: Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 16.6i

15.12j*: Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 16.6j

15.13: Increase to at least 90 percent the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

15.13a: Increase to at least 90 percent the proportion of Mexican-American men who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

15.14: Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

15.14a: Increase to at least 75 percent the proportion of blacks who have ever had their blood cholesterol checked.

15.14b: Increase to at least 75 percent the proportion of Mexican-Americans who have ever had their blood cholesterol checked.

15.14c: Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have ever had their blood cholesterol checked.

15.14d: Increase to at least 75 percent the proportion of Mexican-Americans who have had their blood cholesterol checked within the preceding 2 years.

15.14e: Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have had their blood cholesterol checked within the preceding 2 years.

15.14f: Increase to at least 75 percent the proportion of Asian/Pacific Islanders who have had their blood cholesterol checked within the preceding 2 years.

15.15: Increase to at least 75 percent the proportion of primary care providers who initiate diet and, if necessary, drug therapy at levels of blood cholesterol consistent with current management guidelines for patients with high blood cholesterol.

15.16: Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer high blood pressure and/or cholesterol education and control activities to their employees.

15.17: Increase to at least 90 percent the proportion of clinical laboratories that meet the recommended accuracy standard for cholesterol measurement.

*Duplicate objective.

Priority Area 16
Cancer

Background

Cancer is the second leading cause of death in the United States, accounting for nearly one out of every four deaths (1). An estimated 1,220,000 Americans are expected to be diagnosed with cancer in 2000 and approximately 552,000 are expected to die of cancer. These estimates are based on an increase in the number of older Americans who are at higher risk for developing the disease (2); one-half of the new cases occur in persons 65 years and over (3). Although cancer remains a major health problem in the United States, there is evidence that the prospects of preventing and surviving cancer continue to improve. Specifically, perhaps as much as 50 percent or more of cancer incidence can be prevented through smoking cessation and changed dietary habits (4). The scientific evidence for smoking as a cause of cancer has been recognized for over 40 years. The evidence for diet has emerged over the past decade and has progressed to the extent that recommendations for prudent dietary changes, such as less fat and more fruits and vegetables, can now be made.

Data Summary

Highlights

Trends for most objectives related to cancer mortality (**16.1–16.5**, and **16.17**) improved for the total population in 1998. For all cancers (**16.1**) the mortality rate in 1998 surpassed the year 2000 target. For lung cancer mortality, objective **16.2** met the target that was set to slow the rise in the rate; until 1990 the trend for lung cancer mortality had been rising at a rate that would have exceeded the target. However, the rate actually declined in 1991 for the first time in at least 50 years and again in 1992. Lung cancer mortality remained level in 1993, then dropped again in 1994–98. In 1998 the age-adjusted death rate for colorectal cancer (**16.5**) continued to decline and surpassed the year 2000 target. However, the rate of improvement in cancer mortality for the total population was not observed for all population subgroups. Improvement was also observed in cancer risk factors such as smoking (**16.6**) and dietary fat intake (**16.7**). Data for 1998 indicate that substantial progress was made in increasing the numbers of women receiving breast exams and mammograms in the past two years (**16.11**). The proportions of people who have received other cancer screening tests such as Pap tests (**16.12**), fecal occult blood tests and proctosigmoidoscopy exams (**16.13**), and oral exams (**16.14**) also increased over the last decade.

Summary of Progress

Seven objectives (**16.1–16.3**, **16.5**, **16.11**, **16.15** and **16.17**) met the year 2000 targets. Progress toward the year 2000 targets was made for 8 of the 17 objectives (**16.4**, **16.6–16.8**, **16.10**, **16.12**, **16.13** and **16.16**). It should be noted that in many cases the actual improvement is small. Progress for two objectives (**16.9** and **16.14**) was mixed. See table 16 for the tracking data for the objectives in this priority area and figure 16 for a quantitative assessment of progress.

Discussion

Cancer death rates vary by gender, race, and ethnicity. Age-adjusted male and female cancer death rates peaked in 1990 at 164.7 and 111.7 per 100,000, respectively. After the peak year, through 1998, male cancer deaths for all sites decreased on average by 1.5 percent per year, and female deaths decreased on average by 0.8 percent per year.

While there has been significant progress in reaching the year 2000 targets, all population groups have not benefitted equally. African Americans are about 34 percent more likely to die of cancer than are whites and more than two times as likely to die of cancer as Asian/Pacific Islanders, American Indians, or Hispanics. However, some specific forms of cancer affect other ethnic groups at rates higher than the national average (for example, stomach and liver cancers among Asian American populations and colon and rectum cancers among Alaska Natives). Also, certain racial and ethnic groups have lower survival rates than whites for most cancers. The challenge to understanding these differences between the races provides an opportunity to reduce illness and death and to improve survival rates.

The growing knowledge in behavioral and population research and cancer control science is allowing the Nation to better understand and address the burden of cancer. By studying patterns of cancer, searching for its causes, more fully comprehending the behaviors of individuals and communities, and understanding the impact of the public health and medical systems—the tools to effectively reduce that burden are being created. In addition, the increased understanding of cancer's disproportionate effect on some population groups is paving the way for effective interventions.

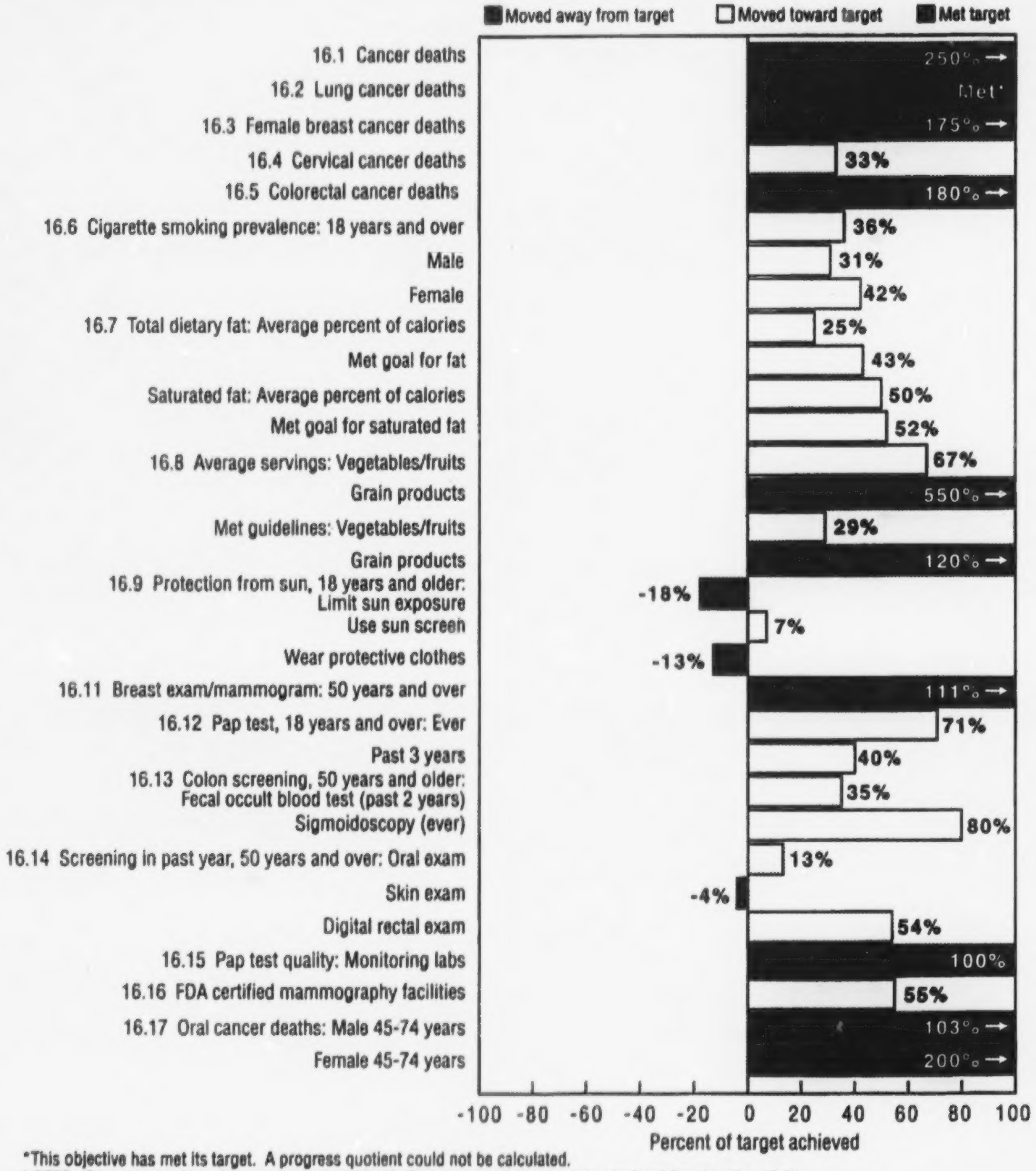
Transition to *Healthy People 2010*

Most of the *Healthy People 2000* objectives were retained in *Healthy People 2010*, some with new targets that will further challenge the United States to achieve even better health. Reducing the number of new cases and deaths from cancer remains a challenge for *Healthy People 2010*. Further improvement in the cancer risk behaviors and cancer screening utilization are important objectives to achieve reduced cancer.

Several new objectives were developed in *Healthy People 2010*. Prostate and melanoma cancer deaths have risen rapidly, so new objectives were introduced. Also, the importance of following life-long healthy behaviors is emphasized by adding a focus on adolescent cancer risk behaviors to complement the adult risk behavior objectives. Improving long-term survival rates is included as a new objective in *Healthy People 2010*. To evaluate this, improved data will be required from State cancer registries. Therefore, increasing the number of these registries is also a new objective.

Some of the topics covered in the *Healthy People 2000* priority area on Cancer were reorganized into other focus area chapters in *Healthy People 2010*. The rationale for this change was to eliminate duplication of similar objectives in separate focus areas. Several objectives in the Cancer focus area for *Healthy People 2000* were moved to other chapters, including

Figure 16. Final status of Cancer objectives



*This objective has met its target. A progress quotient could not be calculated.

NOTES: Complete tracking data are shown in table 16. Progress quotients are not calculated for objective 16.10.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
FDA is Food and Drug Administration.

Nutrition and Overweight, Oral Health and Tobacco Use.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and direction for this area.

Data Issues

The death rates shown in objectives **16.1–16.5** are age adjusted to the 1940 U.S. population. (See Appendix for more information on age adjustment.) The National Cancer Institute age adjusts cancer deaths to the 1970 U.S. population. When the 1970 standard population is used, the equivalent baseline, interim, and target rates are all somewhat higher than those generated using the 1940 population. However, the trends are very similar.

Definitions

Beginning in 1992, the definition of current smoker (**16.6**) was modified to specifically include persons who smoked only "some days." Prior to 1992, a current smoker was defined by the questions "Have you ever smoked 100 cigarettes in your lifetime?" and "Do you smoke now?" In 1992, cigarette smoking data were collected for a half-sample of the National Health Interview Survey with half the respondents (one-quarter sample) using these two smoking questions and the other half of respondents (one-quarter sample) using a revised smoking question: "Do you smoke everyday, some days, or not at all?" in place of the second question. The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

Estimates for objective **16.8** (fruit, vegetable, and grain intakes) exclude fruits and vegetables eaten as part of potato chips, condiments, fruit-flavored candies, jellies, and jams.

Two subobjectives in this chapter, **16.11b** (mammograms) and **16.12d** (Pap tests), target women with low income. Prior to 1993, these subobjectives were tracked with data for women with annual family incomes of less than $10,000. Because of changes in the poverty level over time, beginning with data for 1993, these subobjectives were tracked with data for women with annual family incomes below the census poverty threshold (see Appendix for more information).

Data from the Health Care Financing Administration indicate that virtually all laboratories meet the standards set by the Clinical Laboratory Improvements Act (**16.15**). In 1993–96, only 8 of 3,200 laboratories were cited with deficiencies and terminated from medical payments until the deficiencies were corrected. Therefore, the year 2000 target of 100 for this objective is considered met.

Data Sources

Data for 1992 for objective **16.10** (tobacco, diet, and cancer screening and counseling) are from the Primary Care Provider Surveys (PCPS). The data on formulation of a diet/nutrition plan represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on strategies to quit smoking refer to the proportion of providers who routinely provided these services to patients who needed the services. The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

For objective **16.16**, 1990 baseline and 1992 update data represent the proportion of mammography facilities that were certified by the American College of Radiology. The 1995–97 updates measure how well the 4,200 facilities performing mammograms met the Mammogram Quality Standards Act (MQSA) quality standards. "No noncompliances" means the facility was in full compliance with MQSA. Level 1 findings are the most serious and facilities with level 1 findings receive a warning letter from the Food and Drug Administration (FDA) and must respond to it. Although level 2 and level 3 findings are considered less serious, they also must be corrected. Information on the types of violations included in these levels has been published by FDA (5).

References

1. American Cancer Society. Cancer facts and figures, 2000. Atlanta, Georgia: American Cancer Society, Inc. 2000.

2. American Cancer Society. Cancer facts and figures, 1994. Atlanta, Georgia: American Cancer Society, Inc. 1994.

3. Reis LAG, Kosary CL, Hankey BF, et al. SEER Cancer Statistics Review, 1973–1996. Bethesda, Maryland: National Cancer Institute. 1999.

4. National Cancer Institute, Division of Cancer Prevention and Control. Fiscal Year 1994 Annual Report. Rockville, Maryland: National Institutes of Health. 1994.

5. Center for Devices and Radiological Health. Mammography matters; vol 2 issue 3. Columbia, Maryland: Food and Drug Administration. 1995.

Table 16. Cancer objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	16.1*	**Cancer deaths** (age adjusted per 100,000)	1987	134	135	135	133	133	132	130	128	126	124	---	130
		a. Black	1990	182	...	179	178	177	174	172	168	165	161	---	175
■	16.2*	**Slow the rise in lung cancer deaths** (age adjusted per 100,000)	1987	38.5	39.9	39.6	39.3	39.3	38.7	38.3	37.8	37.3	36.9	---	42
		a. Female	1990	25.6	...	25.8	26.3	26.5	26.6	26.9	26.8	26.9	27.0	---	27
		b. Black male	1990	86.1	...	83.1	81.2	80.7	77.6	75.7	73.4	70.5	68.5	---	91
■	16.3	**Female breast cancer deaths** (age adjusted per 100,000)	1987	23.0	23.1	22.7	21.9	21.5	21.3	21.0	20.2	19.4	18.8	---	20.6
		a. Black female	1990	27.5	...	27.7	27.0	27.1	26.9	27.5	26.5	26.7	25.3	---	25
☐	16.4	**Cervical cancer deaths** (age adjusted per 100,000)	1987	2.8	2.8	2.7	2.7	2.6	2.7	2.5	2.5	2.5	2.3	---	1.3
		a. Black female	1990	5.9	...	5.7	6.1	5.7	5.0	5.2	4.7	4.8	4.4	---	3
		b. Hispanic female[1]	1977–83	3.6	3.3	3.0	3.4	3.1	3.5	3.1	3.1	3.0	2.5	---	2
■	16.5*	**Colorectal cancer deaths** (age adjusted per 100,000)	1987	14.7	13.8	13.5	13.2	13.1	13.0	12.8	12.3	12.1	12.0	---	13.2
		a. Black	1990	18.1	...	17.5	17.3	17.6	17.3	17.4	16.9	16.9	16.8	---	16.5
☐	16.6*	**Cigarette smoking prevalence**													
		People 18 years and over	1987	29%	25%	26%	[2]27%	25%	26%	25%	---	‡25%	‡24%	---	15%
		Male	1987	31%	28%	28%	[2]29%	28%	28%	27%	---	‡28%	‡26%	---	15%
		Female	1987	27%	23%	23%	[2]25%	22%	23%	23%	---	‡22%	‡22%	---	15%
		a. People with high school education or less 20 years and over	1987	34%	31%	31%	[2]32%	30%	31%	30%	---	‡31%	‡31%	---	20%
		b. Blue-collar workers 18 years and over	1987	41%	36%	36%	[2]36%	34%	39%	36%	---	‡37%	‡36%	---	20%
		c. Military personnel	1988	42%	---	---	[2]35%	---	---	32%	---	---	30%	---	20%
		d. Black 18 years and over	1987	33%	26%	29%	[2]28%	26%	27%	26%	---	‡27%	‡25%	---	18%
		e. Hispanic 18 years and over	1987	24%	23%	20%	[2]21%	20%	20%	18%	---	‡20%	‡19%	---	15%
		f. American Indian/Alaska Native 18 years and over	1979–87	[3]42–70%	38%	31%	[2]40%	39%	40%	35%	---	‡32%	‡37%	---	20%
		g. Southeast Asian male	1984–88	55%	[4]35%	[4]36–41%	---	---	---	---	---	---	---	---	20%
		h. Females of reproductive age (18–44 years)	1987	29%	26%	27%	[2]28%	26%	27%	26%	---	‡26%	‡25%	---	12%
		i. Pregnant females	1985	25%	19%	20%	---	20%	---	18%	14%	13%	13%	---	10%
		j. Females who use oral contraceptives	1983	36%	[5]26%	---	---	---	---	24%	---	---	---	---	10%
☐	16.7*	**Dietary fat intake among people 2 years and over[6]**													
		National Health and Nutrition Examination Survey													
		Average percent of calories from total fat	1976–80	[7]36%	---	---	---	---	[8]34%	---	---	---	---	---	30%

See footnotes and key at end of table.

Table 16. Cancer objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Average percent of calories from saturated fat	1976–80	[7]13%	- - -	- - -	- - -	- - -	[8]12%	- - -	- - -	- - -	- - -	- - -	10%
		Percent who met goal for total fat	1988–94	[5]27%	...	...	...	...	...	- - -	- - -	- - -	- - -	- - -	50%
		Percent who met goal for saturated fat	1988–94	[5]29%	...	...	...	...	...	- - -	- - -	- - -	- - -	- - -	50%
		Continuing Survey of Food Intakes by Individuals													
		Average percent of calories from total fat	1989–91	34%	...	...	- - -	- - -	33%	33%	33%	- - -	- - -	- - -	30%
		Average percent of calories from saturated fat	1989–91	12%	...	...	- - -	- - -	11%	11%	11%	- - -	- - -	- - -	10%
		Percent who met goal for fat	1989–91	22%	...	...	- - -	- - -	32%	33%	34%	- - -	- - -	- - -	50%
		Percent who met goal for saturated fat	1989–91	21%	...	...	- - -	- - -	34%	35%	36%	- - -	- - -	- - -	50%
☐	16.8*	**Average daily intake of vegetables, fruits, and grain products among people 2 years and over[6]**													
		Average number of servings													
		Vegetables and fruits	1989–91	4.1	...	...	- - -	- - -	4.6	4.7	4.7	- - -	- - -	- - -	5.0
		Grain products	1989–91	5.8	...	...	- - -	- - -	6.7	6.8	6.9	- - -	- - -	- - -	6.0
		Proportion who met Dietary Guidelines goal													
		Vegetables and fruits	1989–91	29%	...	...	- - -	- - -	36%	37%	35%	- - -	- - -	- - -	50%
		Grain products	1989–91	40%	...	...	- - -	- - -	50%	53%	52%	- - -	- - -	- - -	50%
☐	16.9	**Actions to limit sun exposure**													
		Among people 18 years and over those very likely to:													
		Limit sun exposure	1992	[5]32%	...	...	...	- - -	- - -	- - -	- - -	- - -	27%	- - -	60%
		Use sun screen	1992	[5]29%	...	...	...	- - -	- - -	- - -	- - -	- - -	31%	- - -	60%
		Wear protective clothing	1992	28%	...	...	...	- - -	- - -	- - -	- - -	- - -	24%	- - -	60%
		Avoid artificial ultraviolet light	...	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
☐	16.10	**Tobacco, diet, and cancer screening and counseling by clinicians**													
		Smoking patients	1986	[9]52%	[9,10]96%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Digital rectal	...	- - -	[10]49%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Blood stool	...	- - -	[10]56%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Proctoscopic exam	...	- - -	[10]23%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Breast physical	...	- - -	[10]78%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Mammogram	...	- - -	[10]37%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Pap test	...	- - -	[10]55%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	75%
		Percent of clinicians routinely providing service to 81–100% of patients													

See footnotes and key at end of table.

Table 16. Cancer objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Formulation of diet/nutrition plan													
		Pediatricians	...	---	---	---	31%	---	---	---	---	---	[11,12]---	---	75%
		Nurse practitioners	...	---	---	---	31%	---	---	---	---	---	[11]31%	---	75%
		Obstetricians/gynecologists	...	---	---	---	19%	---	---	---	---	---	[11,12]---	---	75%
		Internists	...	---	---	---	33%	---	---	---	---	---	[11,12]---	---	75%
		Family physicians	...	---	---	---	24%	---	---	---	---	---	[11,12]---	---	75%
		Discussion of strategies to quit smoking													
		Pediatricians	...	---	---	---	19%	---	---	---	---	---	[11,12]---	---	75%
		Nurse practitioners	...	---	---	---	20%	---	---	---	---	---	[11]39%	---	75%
		Obstetricians/gynecologists	...	---	---	---	28%	---	---	---	---	---	[11,12]---	---	75%
		Internists	...	---	---	---	50%	---	---	---	---	---	[11,12]---	---	75%
		Family physicians	...	---	---	---	43%	---	---	---	---	---	[11,12]---	---	75%
■	16.11	**Breast examination and mammogram**													
		Female 50 years and over (preceding 1–2 years)	1987	25%	49%	---	51%	55%	56%	---	---	---	64%	---	60%
		a. Hispanic female 50 years and over	1987	18%	42%	---	47%	47%	50%	---	---	---	60%	---	60%
		b. Low-income female 50 years and over (annual family income less than $10,000)[13]	1987	15%	32%	---	32%	39%	38%	---	---	---	48%	---	60%
		c. Female 50 years and over with less than high school education	1987	16%	35%	---	35%	42%	42%	---	---	---	51%	---	60%
		d. Female 70 years and over	1987	18%	39%	---	39%	44%	45%	---	---	---	56%	---	60%
		e. Black female 50 years and over	1987	19%	43%	---	48%	54%	56%	---	---	---	62%	---	60%
□	16.12	**Pap test[14]**													
		Ever received	1987	88%	---	---	93%	95%	94%	---	---	---	93%	---	95%
		a. Hispanic female 18 years and over	1987	75%	---	---	88%	88%	91%	---	---	---	85%	---	95%
		b. Female 70 years and over	1987	76%	---	---	86%	91%	90%	---	---	---	88%	---	95%
		c. Female 18 years and over with less than high school education	1987	79%	---	---	87%	91%	91%	---	---	---	86%	---	95%
		d. Low-income female 18 years and over (annual family income less than $10,000)[13]	1987	80%	---	---	89%	89%	91%	---	---	---	86%	---	95%
		Received within preceding 3 years	1987	75%	---	---	74%	78%	77%	---	---	---	79%	---	85%
		a. Hispanic female 18 years and over	1987	66%	---	---	74%	77%	74%	---	---	---	75%	---	80%
		b. Female 70 years and over	1987	44%	---	---	46%	54%	53%	---	---	---	56%	---	70%
		c. Female 18 years and over with less than high school education	1987	58%	---	---	58%	64%	62%	---	---	---	66%	---	75%
		d. Low-income female 18 years and over (annual family income less than $10,000)[13]	1987	64%	---	---	65%	71%	72%	---	---	---	70%	---	80%

See footnotes and key at end of table.

Table 16. Cancer objective status—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
☐	16.13	**Fecal occult blood test and proctosigmoidoscopy** (50 years and over)													
		Received fecal occult blood testing within preceding 2 years	1987	27%	---	---	30%	---	---	---	---	---	35%	---	50%
		Ever received proctosigmoidoscopy	1987	25%	---	---	33%	---	---	---	---	---	37%	---	40%
		People 65 years and over with routine checkup in past 2 years who had a fecal occult blood test	...	---	---	36%	---	---	---	---	---	---	---	---	...
☐	16.14	**Oral, skin, and digital rectal examinations**													
		People 50 years and over (during past year)	...	---	---	---	---	---	---	---	---	---	---	---	40%
		Oral	...	---	---	---	9%	---	---	---	---	---	13%	---	...
		Skin	...	---	---	---	17%	---	---	---	---	---	16%	---	...
		Digital rectal	1987	27%	---	---	38%	---	---	---	---	---	34%	---	...
■	16.15	**Pap test quality**													
		Monitoring cytology laboratory	1988–92	[15]100%	...	...	...	---	---	---	[16,17]100%	---	---	---	100%
☐	16.16	**Monitoring and certifying mammography facilities**													
		Certified by FDA	1990	18–21%	...	---	64%	---	---	---	---	---	---	---	100%
		Mammogram Quality Standards Act compliance													
		No non-compliances	...	---	---	---	---	---	---	31.9%	48.2%	56.4%	---	---	...
		Level 3 findings	...	---	---	---	---	---	---	47.1%	38.6%	28.6%	---	---	...
		Level 2 findings	...	---	---	---	---	---	---	18.8%	11.9%	13.9%	---	---	...
		Level 1 findings	...	---	---	---	---	---	---	2.2%	1.4%	1.1%	---	---	...
▨	16.17[#]	**Oral cancer deaths** (per 100,000)													
		Male 45–74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	10.3	10.4	---	10.5
		Female 45–74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	3.5	3.4	---	4.1
		a. Black male 45–74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	20.6	21.0	---	26.0
		b. Black female 45–74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	5.2	4.6	---	6.9

--- Data not available.
... Category not applicable.

Final objective status: ▨ Met ☐ Toward ☐ Mixed/ no change ░ Away ☐ Cannot assess

[#] Baseline has been revised.

[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.

[1] Updates for 1990–98 exclude data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality.

[2] In 1992, the definition of "current" changed to include "some days" (intermittent smoking).

[3] Estimates for different tribes.

[4] Vietnamese males only.

[5] 1986 data.

[6] Estimates are from 1-, 2-, or 3-day dietary data.

[7] For people 2–74 years.

[8] 1988–94 data.

[9] Data reflect tobacco screening and counseling only.

[10] 1989 data.

[11] 1997–98 data.
[12] Response rate for this group was too low to produce reliable estimates.
[13] Beginning with 1993, data are for women with family incomes below the Census poverty threshold.
[14] Includes women without a uterine cervix.
[15] 15 of 3,200 laboratories closed or limited in cytology testing.
[16] 1993–96 data.
[17] 8 of 3,200 laboratories terminated from medical payments until differences corrected.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
16.1*, 16.1a	National Vital Statistics System, CDC, NCHS.
16.2*, 16.2a, b	National Vital Statistics System, CDC, NCHS.
16.3, 16.3a	National Vital Statistics System, CDC, NCHS.
16.4, 16.4a	National Vital Statistics System, CDC, NCHS.
16.4b	Baseline: Surveillance, Epidemiology, and End Results, NIH, NCI.
	Updates: National Vital Statistics System, CDC, NCHS.
16.5*, 16.5a	National Vital Statistics System, CDC, NCHS.
16.6*,16.6a, b, d, e, h	National Health Interview Survey, CDC, NCHS.
16.6c	Baseline, 1992, and 1995 updates: Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
	1998 update: DoD Survey of Health Related Behaviors, Research Triangle Institute.
16.6f	Baseline: CDC.
	Updates: National Health Interview Survey, CDC, NCHS.
16.6g	Baseline: Local surveys.
	1990 update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. Western J of Med 153:34–9. 1990.
	1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporations. JAMA 227(21):1726–31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. AJPH 87(6):1031–4. 1997.
16.6i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS.
	1993 update: National Health and Pregnancy Survey, NIH, NIDA.
	1995 update: National Survey of Family Growth, CDC, NCHS.
	1996–98 updates: National Vital Statistics System, CDC, NCHS.
16.6j	1983 baseline and 1988 update: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
	1995 update: National Survey of Family Growth, CDC, NCHS.
16.7*	1976–80 and 1988–94 data: National Health and Nutrition Examination Survey, CDC, NCHS.
	1989–91 baselines and 1994–96 updates: Continuing Survey of Food Intakes by Individuals, USDA.
16.8*	Continuing Survey of Food Intakes by Individuals, USDA.
16.9	National Health Interview Survey, CDC, NCHS.
16.10	1986 baseline: Physician Practice Study, University of Chicago.
	1989 updates: Survey of Physician's Attitudes and Practices in Early Cancer Detection, NIH, NCI.
	1992 data: Primary Care Provider Surveys, OPHS, ODPHP.
	1997–98 data: Prevention in Primary Care Study, American College of Preventive Medicine.
16.11, 16.11a–d	National Health Interview Survey, CDC, NCHS.
16.12, 16.12a–d	National Health Interview Survey, CDC, NCHS.
16.13	National Health Interview Survey, CDC, NCHS.
16.14	National Health Interview Survey, CDC, NCHS.
16.15	Clinical Laboratory Improvements Act, HCFA.
16.16	Baseline and 1992 update: American College of Radiology. 1995–97 data: Mammography Quality Assurance Program, FDA.
16.17*, 16.17a,b	National Vital Statistics System, CDC, NCHS.

* Duplicate objective.

Cancer Objectives

16.1*: Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

Duplicate objective: 2.2

16.1a*: Reverse the rise in cancer deaths among blacks to achieve a rate of no more than 175 per 100,000 people.

Duplicate objective: 2.2a

16.2*: Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

Duplicate objective: 3.2

16.2a*: Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.

Duplicate objective: 3.2a

16.2b*: Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.

Duplicate objective: 3.2b

16.3: Reduce breast cancer deaths to no more than 20.6 per 100,000 women.

16.3a: Reduce breast cancer deaths among black females to no more than 25 per 100,000 women.

16.4: Reduce deaths from cancer of the uterine cervix to no more than 1.3 per 100,000 women.

16.4a: Reduce deaths from cancer of the uterine cervix among black females to no more than 3 per 100,000 women.

16.4b: Reduce deaths from cancer of the uterine cervix among Hispanic females to no more than 2 per 100,000 women.

16.5*: Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 2.23

16.5a*: Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000 people.

Duplicate objective: 2.23a

16.6*: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 3.4 and 15.12

16.6a*: Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 15.12a

16.6b*: Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 18 and older.

Duplicate objectives: 3.4b and 15.12b

16.6c*: Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 15.12c

16.6d*: Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.

Duplicate objectives: 3.4d and 15.12d

16.6e*: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.

Duplicate objectives: 3.4e and 15.12e

16.6f*: Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 15.12f

16.6g*: Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 15.12g

16.6h*: Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 15.12h

16.6i*: Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 15.12i

16.6j*: Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 15.12j

16.7*: Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 2.5 and 15.9

16.8*: Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of 5 or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of 6 or more servings of grain products.

Duplicate objective: 2.6

16.9: Increase to at least 60 percent the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light (e.g., sun lamps, tanning booths).

16.10: Increase to at least 75 percent the proportion of primary care providers who routinely counsel patients about tobacco-use cessation, diet modification, and cancer screening recommendations,which includes providing information on the potential benefit or harm attributed to the various screening modalities and discussion of risk factors associated with breast, prostate, cervical, colorectal, and lung cancers.

16.11: Increase to at least 60 percent those women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 1 to 2 years.

> **16.11a**: Increase to at least 60 percent Hispanic women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.
>
> **16.11b**: Increase to at least 60 percent low-income women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.
>
> **16.11c**: Increase to at least 60 percent women aged 50 and older with less than high school education who have received a clinical breast examination and a mammogram within the preceding 2 years.
>
> **16.11d**: Increase to at least 60 percent women aged 70 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.
>
> **16.11e**: Increase to at least 60 percent black women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.12: Increase to at least 95 percent the proportion of women aged 18 and older who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years.

> **16.12a**: Increase to at least 95 percent the proportion of Hispanic women aged 18 and older who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 3 years.
>
> **16.12b**: Increase to at least 95 percent the proportion of women aged 70 and older who have ever received a Pap test, and to at least 70 percent those who received a Pap test within the preceding 3 years.
>
> **16.12c**: Increase to at least 95 percent the proportion of women aged 18 and older with less than a high school education who have ever received a Pap test, and to at least 75 percent those who received a Pap test within the preceding 3 years.
>
> **16.12d**: Increase to at least 95 percent the proportion of low-income women (annual family income less than $10,000) aged 18 and older who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 3 years.

16.13: Increase to at least 50 percent the proportion of people aged 50 and older who have received fecal occult blood testing within the preceding 1 to 2 years, and to at least 40 percent those who have ever received proctosigmoidoscopy.

16.14: Increase to at least 40 percent the proportion of people aged 50 and older visiting a primary care provider in the preceding year who have received oral, skin, and digital rectal examinations during one such visit.

16.15: Ensure that Pap tests meet quality standards by monitoring and certifying all cytology laboratories.

16.16: Ensure that mammograms meet quality standards by inspecting and certifying 100 percent of mammography facilities according to the requirements of the Mammography Quality Standards Act.

16.17*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

Duplicate objectives: 3.17 and 13.7

> **16.17a***: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.
>
> Duplicate objectives: 3.17a and 13.7a
>
> **16.17b***: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 6.9 per 100,000 among black females aged 45–74.
>
> Duplicate objectives: 3.17b and 13.7b

*Duplicate objective.

Priority Area 17 Diabetes and Chronic Disabling Conditions

Background

Diabetes and chronic disabling conditions continue to pose a significant challenge to the public health of the Nation. As the population of the United States ages, more people are expected to be affected by these conditions. These conditions can impinge on quality of life and lead to physical, emotional, social, and economic costs, not only for individuals, but also for their families and the Nation. Chronic disabling conditions that significantly affect the quality of life encompass diabetes, chronic kidney disease, arthritis, deformities or orthopedic impairments, and mental retardation. Other conditions include asthma, hearing and visual impairments, overweight, and peptic ulcer disease. (1–4).

Some 800,000 new cases of diabetes are diagnosed each year, or 2,200 each day (5,6). The prevalence of diabetes, as well as diabetes-related complications, is increasing in the United States (5–7). End stage renal disease (ESRD) among persons with diabetes has almost tripled in the past decade (8). The number of persons with diabetes increased steadily during the 1990's; 1988–94 data showed that 10.5 million persons had been diagnosed with diabetes, while 5.5 million persons estimated to have the disease were undiagnosed (1). Furthermore, because diabetes is most common among persons over 60 years of age (9), the number of persons with diabetes is expected to rise as the population ages. Diabetes remains the seventh leading cause of death (10).

An estimated 54 million persons in the United States, or nearly 20 percent of the population, are living with some level of disability (11). The direct medical and indirect annual costs associated with disability are more than $300 million, or 4 percent of the gross national product (12).

Asthma is a serious and growing health problem. An estimated 14.9 million persons in the United States have asthma (13). The number of people with asthma increased by 102 percent between the years 1979–80 and 1993–94 (14). Asthma is responsible for about 500,000 hospitalizations (13), 5,000 deaths (13), and 134 million days of restricted activity a year (14). Yet most of the problems caused by asthma could be averted if persons with asthma and their health care providers managed the disease according to established guidelines. Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function, and educating asthma patients to become partners in their own care (15,16). Such prevention efforts are essential to interrupt the progression from disease to functional limitation and disability and to improve the quality of life for persons with asthma.

The various forms of arthritis—the leading cause of disability in the United States (17)—affect more than 15 percent of the total U.S. population (43 million persons) and more than 20 percent of the adult population (18–21). Other musculoskeletal conditions can also lead to disability. About 13–18 percent of women 50 years of age and over and 3–6 percent of men 50 years of age and over have osteoporosis (22), a reduction in bone mass or density that leads to deterioration or fragile bones, whose major health consequence is an increased risk of fractures. Chronic back conditions are also common and can be debilitating. In the United States, back pain is the most frequent cause of activity limitation in people under 45 years of age (23,24), the second most frequent reason for physician visits, the fifth ranking reason for hospitalization, and the third most common reason for surgical procedures (25).

Data Summary

Highlights

By the end of the 20th century, notable strides had been made in improving the lives of people with diabetes and chronic disabling conditions. The average number of years of healthy life for the total population (**17.1**) increased from a baseline of 64 years in 1990 to 65.2 years in 1998, exceeding the *Healthy People 2000* target. Among special populations targeted by the objective, Hispanics have met the year 2000 target, while progress was made for blacks and older adults. Assuming full compliance with the Americans with Disabilities Act of 1990, that prohibits employers from discriminating against disabled individuals, all worksites had policies or programs for hiring people with disabilities (**17.19**).

Several other measures of chronic disability improved over the decade. The rates of both significant hearing impairments (**17.6**) and significant visual impairments (**17.7**) decreased. Participation in moderate (**17.13**) physical activity five or more times per week increased over the decade, meeting the year 2000 target of 30 percent, whereas the proportion of adults participating in physical activity seven or more times per week moved toward, but did not meet the 30-percent target. The proportion of perimenopausal women receiving counseling about estrogen replacement therapy (**17.18**) increased from 80 percent in 1994 to 89 percent in 1998. A greater proportion of people with diabetes had dilated eye exams (**17.23**) in 1998 than in 1989, an 8-percent increase.

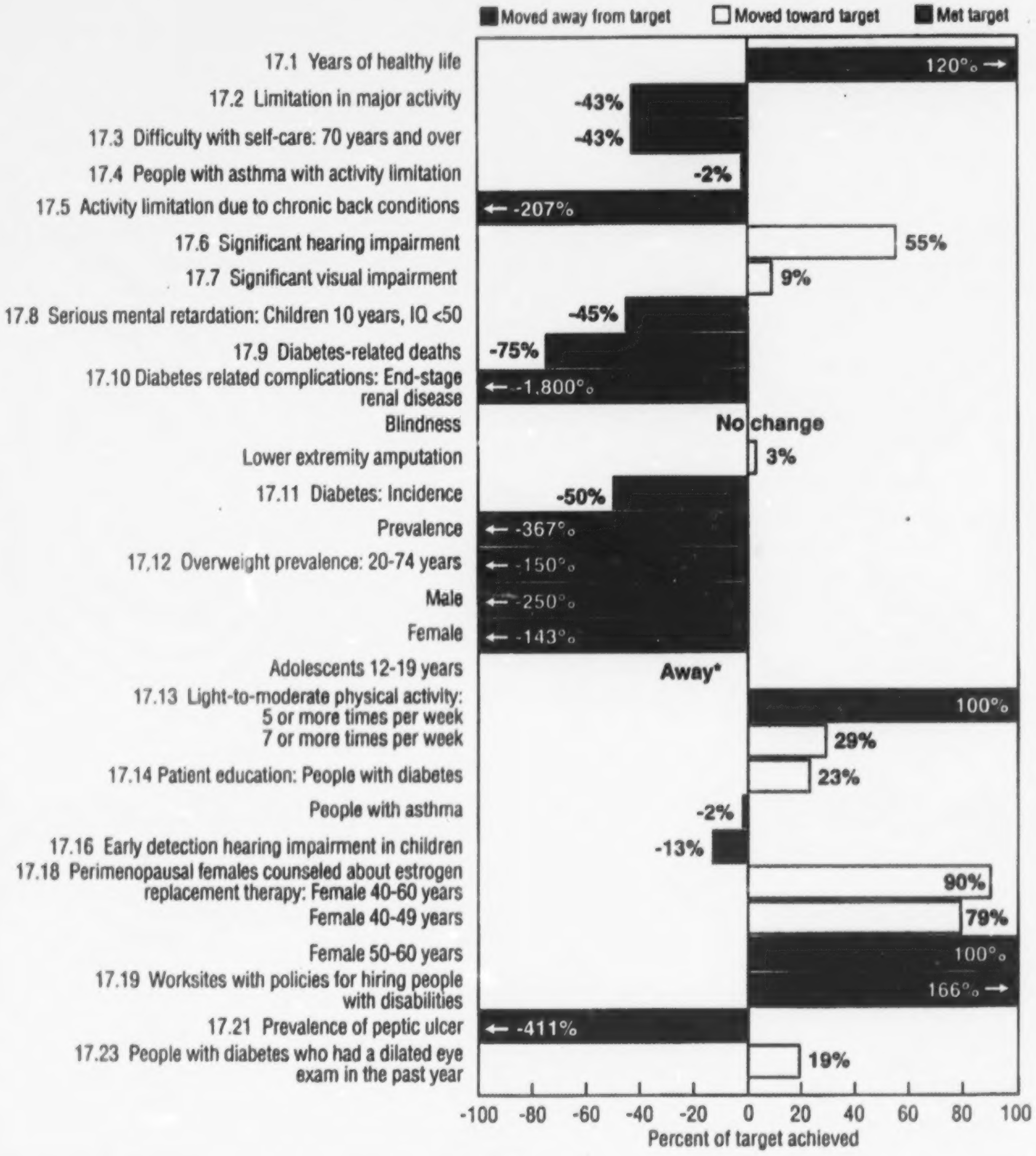
In other areas, however, measures moved away from the year 2000 targets. The rate of activity limitation due to chronic back conditions (**17.5**) increased from 21.9 per 1,000 persons in 1986–88 to 27.9 per 1,000 persons in 1994–96. Both the incidence and prevalence of diabetes (**17.11**) increased as did the rate of diabetes-related deaths (**17.9**). The prevalence of peptic ulcer (**17.21**) increased from the 1991 baseline of 20 percent to 28 percent in 1998.

Summary of Progress

Data are available to assess the progress of 22 of the 23 objectives that address diabetes and chronic disabling conditions. Two objectives (**17.1** and **17.19**) met their year 2000 targets. Six objectives (**17.6, 17.7, 17.13, 17.18, 17.22,** and **17.23**) moved toward the year 2000 targets. Eleven objectives (**17.2–17.5, 17.8, 17.9, 17.11, 17.12, 17.15, 17.16,** and **17.21**) moved away from their targets. See table 17 for the tracking data for the objectives in this priority area and figure 17 for a quantitative assessment of progress.

For three objectives (**17.10, 17.14,** and **17.17**), progress among the multiple measures used for tracking was mixed. Progress could not be assessed for one

Figure 17. Final status of Diabetes and Chronic Disabling Conditions objectives



* This objective has moved away from its target. A progress quotient could not be calculated.

NOTE: Complete tracking data are shown in table 17. Progress quotients are not calculated for objective 17.15, 17.17, 17.20, and 17.22. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

objective (**17.20**) because it lacked baseline data.

Discussion

Several factors account for what is considered to be a diabetes epidemic, including the following: behavioral elements (improper nutrition, for example, increased fat consumption; decreased physical activity; obesity); demographic changes (aging, increased growth of at-risk populations); improved ascertainment and surveillance systems that more completely capture the actual burden of diabetes; and the relative weakness of interventions to change individual, community, or organizational behaviors (5,7,26,27). Several other interrelated factors influence the impact of diabetes, including genetics, cultural and community traditions, and socioeconomic status. In addition, unanticipated scientific breakthroughs, the characteristics of the health care system, and the level of patient knowledge and empowerment all have a great impact on the disease burden associated with diabetes.

Increased insulin resistance and gradual deterioration in the function of insulin-producing cells may explain the high prevalence of diabetes among older people. The rise in diabetes among teenagers may be due to obesity, improper nutrition, and lack of physical activity, the latter of which has been linked to increased television viewing (1).

Particularly within certain racial and ethnic groups, four potential individual reasons account for a greater burden of diabetes:

Increased number of cases of diabetes, which is expected to lead to more amputations, death, and other complications.

- Increased seriousness of diabetes, for example, the presence of hyperglycemia or other serious comorbid conditions, such as high blood pressure or elevated blood lipids.
- Inadequate access to proper diabetes prevention and control programs. Unfortunately, many diabetes at-risk groups reside in medically underserved areas or are without adequate insurance and thus do not receive these types of preventive services.
- Improper quality of care, which can result in ineffective diabetes prevention programs.
- Identifying the reasons for disparities in diabetes health outcomes is important in tailoring programs to those specific areas where deficiencies exist. Collection of racial and ethnic health services data for all health activities is critical to designate the reason for the greater disease burden.

Scientific research has led to greater asthma control than was available in the early 1980s (6). Effective management of asthma includes four components: avoiding or controlling the factors that may make asthma worse (for example, environmental and occupational allergens and irritants), taking appropriate medications tailored to the severity of the disease, objective monitoring of the disease by the patient and the health care professional, and actively involving the patient in managing the disease (16). Effective asthma management reduces the need for hospitalizations and urgent care visits (in either an emergency department or physician's office) and enables patients to enjoy normal activities (28,29).

Advances in human genetics related to asthma are expected to provide better information about the contribution of genetic variation to the development of disease when people are exposed to certain environmental factors and variation in individual response to therapy. The use of this genetic information will improve targeted disease prevention and health management strategies for respiratory diseases.

Genetic research may soon identify persons at high risk for certain types of arthritis and thereby offer a better target for interventions. Current medical care offers considerable relief from pain and other symptoms for all types of arthritis. Available interventions often are not used, however, because of the popular belief that arthritis is part of normal aging, which a person can do nothing about, and that arthritis affects only older persons. However, early diagnosis and aggressive treatment of rheumatoid arthritis with disease-modifying drugs, for example, appear to reduce its symptoms and related disability (30–35).

Educational and behavioral interventions also can relieve symptoms and reduce disability. Telephone contacts with clinicians and several land-based and water-based exercise programs have had beneficial outcomes (36–39). The Arthritis Self-Help Course, a 6-week, 2-hour per week educational intervention, has been shown to reduce pain up to 20 percent beyond outcomes achieved through conventional medical care (40). The course has the additional benefit of reducing medical care costs by reducing the number of physician visits for arthritis (40,41). These and other effective interventions currently are underused, with some interventions reaching less than 1 percent of target populations (42). Countering myths about arthritis and applying available interventions can help reduce the impact of this health problem (1).

A wide range of interventions prevent or reduce lower back problems. These interventions may include activities designed to reduce the physical demands of work activities by redesigning the task or to address the individual's specific needs, such as strength or endurance training or counseling for nutrition and lifestyle changes. Ergonomic interventions that are directed at changing the job or work environment have proved effective in reducing risk of occupational low back pain (1). Thus, it is reasonable to assume that ergonomic approaches would be effective in preventing chronic lower back pain (LBP) as well. Even in a nonwork environment, using ergonomic principles can reduce the physical demands of an activity. Interventions involving training in proper lifting techniques, physical conditioning, and weight loss have been investigated in programmatically oriented studies. These have shown that workplace interventions may have an effect on low back disorders (43). The overall benefits of exercise, nutrition, and lifestyle changes on an individual's health and well-being would certainly justify efforts in this area. Also, interventions directed at improving strength and endurance may have an important impact on reducing activity limitations due to chronic LBP.

Transition to *Healthy People 2010*

Several topics covered in the *Healthy People 2000* priority area on Diabetes and Chronic Disabling Conditions were reorganized into separate focus area chapters in *Healthy People 2010*. Providing for greater emphasis on individual conditions, *Healthy People 2010* contains several new chapters—including Arthritis, Osteoporosis, and Chronic Back Conditions; Chronic Kidney Disease; Diabetes; Respiratory Diseases; Disability and Secondary Conditions; and Vision and Hearing.

In *Healthy People 2010*, Chronic Kidney Disease has a revised measure to track end-stage renal disease (ESRD) incidence. The *Healthy People 2010* focus area has also added measures that address cardiovascular disease deaths among persons with ESRD, counseling for persons with chronic kidney failure, kidney transplantation waiting lists, kidney failure due to diabetes, and medical therapy for persons with diabetes and proteinuria.

Diabetes has expanded its area to track the proportion of persons with diabetes that have been diagnosed with the disease, diabetes death rates among persons with diabetes, cardiovascular disease deaths among persons with diabetes, gestational diabetes, and foot ulcers. In addition to the receipt of annual dilated eye exams among persons with diabetes, there are several measures in *Healthy People 2010* that address secondary and tertiary prevention of complications associated with diabetes including annual urinary microalbumin measurements, annual glycosylated hemoglobin measurements, annual foot examinations, annual dental examinations, aspirin therapy, as well as self-blood-glucose-monitoring.

As a section in the Respiratory Diseases focus area, asthma patient education continues to be measured in *Healthy People 2010*, with other measures continued from *Healthy People 2000*, such as asthma hospitalizations and activity limitation due to asthma. Asthma has several new measures in *Healthy People 2010*, which include asthma deaths, emergency department visits for asthma, school or work days missed by persons with asthma due to asthma, appropriate asthma care, and surveillance systems for the collection of asthma-related data.

In *Healthy People 2010*, both the Vision and Hearing focus area and Disability and Secondary Conditions focus area expand on the objectives included in *Healthy People 2000*. The disability focus area deals with promoting health and preventing disease among persons with disabilities, rather than preventing disabling conditions. The Vision and Hearing focus area covers screening, visual impairments and hearing loss and the appropriate treatments, as well as protective devices to keep hearing and vision intact.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in these areas.

Data Issues

Years of Healthy Life

Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track this objective in three priority areas (**8.1**, **17.1**, and **21.1**). The data used to track the objective come from the National Vital Statistics System (mortality) and the National Health Interview Survey (NHIS) (morbidity). The NHIS was redesigned in 1997 and, therefore, data for 1997–98 may not be comparable with those from previous years. See the Appendix for a discussion of the changes to the NHIS. The methodology for the *Healthy People 2000* years of healthy life measure, developed by NCHS and outside consultants, is published in *Healthy People Statistical Notes* series (44).

Definitions

Subobjective **17.2a** (limitation in major activity due to chronic conditions) targets people with low income. Originally, this subobjective was tracked with data for people with annual family incomes of less than $10,000. Because of changes in the poverty level over time, data are also shown for people with family incomes below Census poverty threshold (see Appendix).

The 1984–85 baseline figures for objective **17.3** were derived by combining estimates for the noninstitutionalized population from the 1984 NHIS Supplement on Aging (SOA) with data for those in nursing homes from the 1985 National Nursing Home Survey (NNHS). The 1984 SOA asked about seven specific personal care activities, also referred to as activities of daily living (ADLs) for persons 65 years of age and over. Because of the way the questions were asked on the NNHS, only five ADLs (bathing, dressing, using the toilet, getting in and out of bed or chair, and eating) were used for tracking this objective. The numerator included respondents to the SOA who said they had "any difficulty" performing at least two ADLs combined with patients for whom administrators reported to the NNHS as "receiving assistance" with at least two ADLs. The denominator for the baseline was the civilian, noninstitutionalized population 65 years of age and over plus the nursing home population 65 years of age and over. The update for this objective is derived from combined data from the 1994 NHIS Second Supplement on Aging (SOA II) and data from the 1995 NNHS using the same questions as were used for the baseline. However, because of the way data were collected in the SOA II, the 1994–95 update is for persons 70 years of age and over. The 1984–85 data were also computed for ages 70 years of age and over to provide a comparison with the 1994–95 update. For objective **17.4**, activity limitation refers to any self-reported limitation in activity attributed to asthma.

The 1990 baseline data for diabetes-related deaths for Puerto Ricans (**17.9d**) have been revised. The original baseline published in the *Midcourse Review and 1995 Revisions* (45) included data for 45 States and the District of Columbia. It did not include data for New York where more than one-half of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States and the District of Columbia (including New York), is considerably lower than originally published and, in fact, has met the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on their birth and death certificates has varied from year to year; see Appendix for more information.

Overweight (**17.12**) for adults is defined as a body mass index (BMI) of 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (46,47). See the Nutrition chapter (Priority Area 2) for additional information.

Objective **17.22** addresses the development and implementation of a national process to identify significant gaps in the Nation's disease prevention and health promotion data. Progress was made, although it is difficult to quantify. See objective **22.4** in the Data and Surveillance chapter (Priority Area 22) for additional information.

Data Sources

Data for objective **17.6** (significant hearing impairment) are from the NHIS, and are based on self-reported hearing impairment (that is, deafness in one or both ears or any trouble hearing in one or both ears). These data are a proxy measure for significant hearing impairment. Hearing impairment covers the range of hearing deficits from mild loss in one ear to profound loss in both ears. Generally, inability to hear sounds at levels softer (less intense) than 20 decibels (dB) constitutes abnormal hearing. Significant hearing impairment is defined as having hearing thresholds for speech poorer than 25 dB.

Significant visual impairment (**17.7**) is also measured using the NHIS. Significant visual impairment is generally defined as a permanent reduction in visual acuity and/or field of vision that is not correctable with eyeglasses or contact lenses. Severe visual impairment is defined as inability to read ordinary newsprint even with corrective lenses. For this objective, self-reported blindness in one or both eyes and other self-reported visual impairments (that is, any trouble seeing with one or both eyes even when wearing glasses or color blindness) from the NHIS is used as a proxy measure for significant visual impairment.

Diabetes-related mortality data (**17.9**) are derived from the multiple-cause-of-death files. Data include all mentions of diabetes on the death certificate, whether as an underlying or contributing cause of death. Diabetes is approximately three times as likely to be listed as a contributing cause of death than as the underlying cause.

Data on lower extremity amputation for objective **17.10–17.10c** come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. Automation of the hospital discharge systems has led to an increase in the use of these forms (UB–82 and UB–92) in recent years. A comparison of NHDS data with those who reported being hospitalized in the NHIS (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites is roughly 22 percent in 1991; the difference in reporting for blacks was negligible (48).

Data for diabetes prevalence (**17.11** and **17.11e**) were tracked using the NHIS. Due to the NHIS redesign that was implemented in 1997, data collected in 1996 and earlier are not comparable with data from the redesigned NHIS, starting with 1997 (see Appendix). American Indian/Alaska Native data for 1996 for objective **17.11a** are from the Indian Health Service (IHS) Patient Comprehensive Care file. The file excludes data from 25 of the 166 IHS service units (representing 11 percent of the population served by IHS) because data were incomplete.

Baseline data for objectives **17.15** and **17.17** (clinical assessment of childhood development and cognitive assessment of older adults) are from the Primary Care Provider Surveys (PCPS). The data on testing/evaluation-inquiry represent the proportion of providers who routinely queried 81–100 percent of their patients about specific functioning. The data on treatment/referral refer to the proportion of providers who routinely provided these services to patients who needed the services. The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

The baseline data for **17.8** (mental retardation) were revised to be comparable with data from the Metropolitan Atlanta Developmental Disabilities Surveillance Program, which uses school counts of children classified as mentally retarded.

Overweight (**17.12**) was tracked with two data sources. The primary data source is the NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source is the NHIS. This survey provides interim estimates shown in an earlier publication (49), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES; prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase however, is different in magnitude from that observed in the data derived from measured height and weight.

Objective **17.13** (light-to-moderate physical activity) is being tracked with the NHIS. The list of activities asked by the NHIS has not been identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years of age and over; thus, the data shown are for people 18–64 years of age. The 1991, 1995, and 1998 surveys asked about some activities different from the previous surveys, but people of all age groups were asked the same questions. Because of these differences, 1985 and 1990 data are not comparable to later data. (See Priority Area 1 for more information.)

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Table 17. Diabetes and Chronic Disabling Conditions objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	17.1* **Years of healthy life**	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.2	‡64.8	‡65.2	---	65
	a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	‡57.4	‡57.8	---	60
	b. Hispanic[1]	1990	64.8	...	63.6	[2]64.0	63.2	64.2	64.0	64.7	‡65.8	‡66.3	---	65
	c. People 65 years and over[3]	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	‡12.0	‡12.2	---	14
☐	17.2 **Limitation in major activity due to chronic conditions**	1988	9.4%	9.3%	9.6%	10.3%	10.6%	10.3%	10.1%	10.0%	---	---	---	8%
	a. Low-income people													
	Annual family income less than $10,000	1988	18.9%	19.2%	19.6%	20.2%	20.9%	21.1%	21.4%	22.7%	---	---	---	15%
	Below poverty level	...	---	14.6%	15.5%	16.2%	16.5%	16.8%	17.1%	17.5%	---	---	---	...
	b. American Indian/Alaska Native	1983–85	13.4%	[4]12.3%	[5]12.0%	[6]12.6%	[7]12.4%	[8]13.3%	[9]13.5%	[10]14.9%	---	---	---	11%
	c. Black	1988	11.2%	10.7%	11.0%	12.2%	12.6%	12.5%	12.2%	12.5%	---	---	---	9%
	d. Puerto Rican	1989–91	11.7%	...	...	[6]12.0%	[7]12.7%	[8]13.4%	[9]13.4%	[10]13.0%	---	---	---	10%
☐	17.3* **People with difficulty performing self-care activities** (per 1,000)													
	People 65 years and over	1984–85	111	---	---	---	---	---	---	---	---	---	---	90
	People 70 years and over	1984–85	$141	---	---	---	---	---	[11]163	---	---	---	---	90
	a. People 85 years and over	1984–85	371	---	---	---	---	---	[11]471	---	---	---	---	325
	b. Black 65 years and over	1984–85	$132	---	---	---	---	---	---	---	---	---	---	98
	Black 70 years and over	1984–85	$166	---	---	---	---	---	[11]218	---	---	---	---	98
☐	17.4 **People with asthma with activity limitation due to asthma**	1986–88	19.4%	[4]20.4%	[5]21.8%	[6]21.8%	[7]22.5%	[8]22.0%	[9]20.7%	[10]19.6	---	---	---	10%
	a. Black	1989–91	30.5%	...	...	[6]30.3%	[7]32.1%	[8]31.5%	[9]29.1%	[10]27.0	---	---	---	19%
	b. Puerto Ricans[12]	...	---	---	---	---	---	---	---	---	---	---	---	22%
☐	17.5 **Activity limitation due to chronic back conditions** (per 1,000)	1986–88	21.9	[4]23.7	[5]25.1	[6]25.3	[7]27.3	[8]28.1	[9]28.8	[10]27.9	---	---	---	19
☐	17.6 **Significant hearing impairment** (per 1,000)	1986–88	88.9	[4]89.5	[5]89.7	[6]93.5	[7]93.6	[8]91.9	[9]89.0	[10]85.1	---	---	---	82
	a. People 45 years and over	1986–88	203	[4]206.2	[5]205.2	[6]215.7	[7]213.2	[8]207.4	[9]200.4	[10]195.9	---	---	---	180
☐	17.7 **Significant visual impairment** (per 1,000)	1986–88	34.5	[4]32.5	[5]31.7	[6]32.8	[7]34.8	[8]35.1	[9]34.0	[10]31.3	---	---	---	30
	a. People 65 years and over	1986–88	87.7	[4]81.8	[5]78.0	[6]79.8	[7]87.4	[8]88.3	[9]84.6	[10]84.2	---	---	---	70
☐	17.8* **Serious mental retardation** (per 1,000)													
	Children 10 years with IQ less than 50	1985–87	$3.1	---	---	[13]3.6	---	---	---	---	---	---	---	2
☐	17.9 **Diabetes-related deaths** (age adjusted per 100,000)	1986	38	38	38	38	40	40	40	41	41	41	---	34
	a. Black	1986	67	71	71	71	74	73	76	76	76	76	---	58
	b. American Indian/Alaska Native	1986	46	53	51	57	60	58	63	63	66	66	---	41
	c. Mexican American[14]	1990	$55.7	...	50.3	51.1	56.6	55.6	56.7	60.1	62.6	60.7	---	50
	d. Puerto Rican[14]	1990	$40.7	...	47.2	48.7	48.5	57.8	63.2	58.5	51.7	49.1	---	42
☐	17.10 **Diabetes-related complications**													
	People with diabetes													
	End-stage renal disease (ESRD) (per 1,000)	1987	1.5	2.5	2.5	2.7	2.4	3.3	3.4	4.1	‡3.2	‡3.3	---	1.4
	Blindness (age adjusted per 1,000)	1987	2.2	2.5	2.4	2.3	2.1	2.2	---	---	---	---	---	1.4
	Lower extremity amputation (per 1,000)	1987	8.2	8.6	6.2	7.8	7.3	8.6	9.4	11.1	‡8.1	‡8.1	---	[illegible]
	Perinatal mortality (among infants of females with established diabetes)	1988	5%	---	---	---	---	---	---	---	---	---	---	2%

See footnotes and key at end of table.

Table 17. Diabetes and Chronic Disabling Conditions objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Major congenital malformations	1988	8%	---	---	---	---	---	---	---	---	---	---	4%
	ESRD due to diabetes (per 1,000)													
	a. Black with diabetes	1983–86	2.2	[15]3.1	---	---	[16]5.7	[17]5.0	[18]5.2	[19]5.5	---	[‡,20]5.7	---	2.0
	b. American Indian/Alaska Native in Indian Health Service areas with diabetes[21]	1983–86	2.1	4.2	4.4	5.4	---	---	---	---	---	---	---	1.9
	Lower extremity amputations due to diabetes (per 1,000)													
	c. Black with diabetes	1987	[5]9.0	8.0	11.1	8.6	8.6	9.1	10.2	10.1	[‡]9.1	[‡]11.7	---	6.1
■ 17.11*	**Diabetes incidence and prevalence**													
	Total population (per 1,000)													
	Incidence of diabetes	1986–88	2.9	[4]2.6	[5]2.5	[6]2.4	[7]2.8	[8]3.1	[9]3.4	[10]3.1	---	---	---	2.5
	Prevalence of diabetes	1986–88	28	[4]26	[5]27	[6]28	[7]30	[8]30	[9]31	[10]31	[‡]---	[‡]---	---	25
	Prevalence of diabetes (per 1,000)													
	a. American Indian/Alaska Native 15 years and over in Indian Health Service areas	1987	69	---	---	---	---	---	---	[21]90	---	---	---	62
	b. Puerto Rican (ages 20–74 years)	1982–84	55	---	---	---	---	---	---	---	---	---	---	49
	c. Mexican American (ages 20–74 years)	1982–84	54	---	---	---	---	[22]66	---	---	---	---	---	49
	d. Cuban American (ages 20–74 years)	1982–84	36	---	---	---	---	---	---	---	---	---	---	32
	e. Black (all ages)	1986–88	36	[4]36	[5]36	[6]36	[7]38	[8]40	[9]42	[10]44	[‡]---	[‡]---	---	32
■ 17.12*	**Overweight prevalence** (Based on measured height and weight unless otherwise indicated)													
	Adults 20–74 years	1976–80	26%	---	---	---	---	[21,23]3	---	---	---	---	---	20%
	Male	1976–80	24%	---	---	---	---	[21,23]3	---	---	---	---	---	20%
	Female	1976–80	27%	---	---	---	---	[21,23]3	---	---	---	---	---	20%
	Adolescents 12–19 years	1976–80	15%	---	---	---	---	[23]24%	---	---	---	---	---	15%
	a. Low-income female 20–74 years	1976–80	37%	---	[24]47%	---	---	---	---	---	---	---	---	25%
	b. Black female 20–74 years	1976–80	44%	---	---	---	---	[21,23]5	---	---	---	---	---	30%
	c. Hispanic female 20–74 years	...	---	---	---	---	---	---	---	---	---	---	---	25%
	Hispanic female 20 years and over (self-reported)[26]	...	---	33%	32%	32%	33%	32%	35%	---	[‡]44%	[‡]46%	---	...
	Mexican American female 20–74 years	1982–84	39%	---	---	---	---	[21,23]50%	---	---	---	---	---	...
	Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	---	---	...
	Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	---	---	...
	d. American Indian/Alaska Native 20 years and over	1984–88	29–75%	---	[25]40%	[25]36%	[25]48%	[25]34%	[25]43%	---	[‡,25]46	[‡,25]45	---	30%
	e. People with disabilities 20 years and over (self-reported)[25]	1985	36%	---	38%	37%	38%	38%	40%	---	---	---	---	25%
	f. Females with high blood pressure 20–74 years	1976-80	50%	---	---	---	---	---	---	---	---	---	---	41%
	g. Males with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	---	---	35%
	h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	[21,23]3	---	---	---	---	---	25%
□ 17.13*	**Light to moderate physical activity**													
	People 6 years and over	...	---	---	---	---	---	---	---	---	---	---	---	30%

See footnotes and key at end of table.

Table 17. Diabetes and Chronic Disabling Conditions objectives—Con

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		People 18 years and over													
		5 or more times per week	1985	[26]22%	[26]23%	[27]24%	---	---	---	23%	---	---	30%	---	30%
		7 or more times per week	1985	[26]16%	[26]16%	[27]17%	---	---	---	16%	---	---	20%	---	30%
		a. Hispanic 18 years and over													
		5 or more times per week	1991	20%	...	...	---	---	---	22%	---	---	29%	---	25%
☐	17.14	**Patient education for people with chronic and disabling conditions**	...	---	---	---	---	---	---	---	---	---	---	---	40%
		a. People with diabetes (classes)	1983–84	32%	[28]33%	39%	---	43%	---	---	---	---	42%	---	75%
		People with diabetes (counseling)	1983–84	68%	---	---	---	---	---	---	---	---	---	---	...
		b. People with asthma (classes)	1991	9%	...	...	---	10%	---	---	---	---	8%	---	50%
		c. Black with diabetes (classes)	1991	34%	...	...	---	50%	---	---	---	---	45%	---	75%
		d. Hispanic with diabetes (classes)	1991	27%	...	...	---	26%	---	---	---	---	31%	---	75%
☐	17.15	**Clinician assessment of childhood development**	...	---	---	---	---	---	---	---	---	---	---	---	80%
		Percent of clinicians routinely providing service to 81–100% of patients (children)													
		Visual acuity testing (3 years and over)													
		Pediatricians	1992	55%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	49%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	30%	...	...	...	---	---	---	---	---	---	---	80%
		Hearing testing (3 years and over)													
		Pediatricians	1992	47%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	46%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	19%	...	...	...	---	---	---	---	---	---	---	80%
		Evaluation of speech													
		Pediatricians	1992	65%	...	...	...	---	---	---	---	---	[29,30]---	---	80%
		Nurse practitioners	1992	51%	...	...	...	---	---	---	---	---	[29]49%	---	80%
		Family physicians	1992	39%	...	...	...	---	---	---	---	---	[29,30]---	---	80%
		Evaluation of motor development													
		Pediatricians	1992	72%	...	...	...	---	---	---	---	---	[29,30]---	---	80%
		Nurse practitioners	1992	56%	...	...	...	---	---	---	---	---	[29]53%	---	80%
		Family physicians	1992	45%	...	...	...	---	---	---	---	---	[29,30]---	---	80%
		Treatment/referral for vision problems													
		Pediatricians	1992	67%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	35%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	56%	...	...	...	---	---	---	---	---	---	---	80%
		Treatment/referral for hearing problems													
		Pediatricians	1992	66%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	35%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	55%	...	...	...	---	---	---	---	---	---	---	80%
		Treatment/referral for speech problems													
		Pediatricians	1992	62%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	34%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	48%	...	...	...	---	---	---	---	---	---	---	80%

See footnotes and key at end of table.

Table 17. Diabetes and Chronic Disabling Conditions objectives—Con

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Treatment/referral for motor problems													
		Pediatricians	1992	55%	...	...	...	---	---	---	---	---	---	---	80%
		Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	---	---	80%
		Family physicians	1992	49%	...	...	...	---	---	---	---	---	---	---	80%
■	17.16	**Early detection of significant hearing impairment in children** (average age in months)[31]	1988	24–30	---	27	---	---	---	---	---	---	29	---	12
		a. Black[12]	...	---	---	---	---	---	---	---	---	---	---	---	12
☐	17.17	**Clinician assessment of cognitive and other functioning in older adults**													
		Percent of clinicians routinely providing service to 81–100% of patients (adults aged 65 years and over)													
		Visual acuity testing													
		Nurse practitioners	1992	24%	...	...	...	---	---	---	---	---	[29]19%	---	60%
		Obstetricians/gynecologists	1992	3%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Internists	1992	15%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Family physicians	1992	12%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Hearing acuity testing													
		Nurse practitioners	1992	16%	...	...	...	---	---	---	---	---	[29]13%	---	60%
		Obstetricians/gynecologists	1992	2%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Internists	1992	9%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Family physicians	1992	7%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Evaluation of physical mobility													
		Nurse practitioners	1992	41%	...	...	...	---	---	---	---	---	[29]35%	---	60%
		Obstetricians/gynecologists	1992	18%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Internists	1992	42%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Family physicians	1992	26%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Evaluation for dementia													
		Nurse practitioners	1992	28%	...	...	...	---	---	---	---	---	[29]22%	---	60%
		Obstetricians/gynecologists	1992	9%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Internists	1992	23%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Family physicians	1992	13%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Inquiry about urinary incontinence													
		Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	[29]24%	---	60%
		Obstetricians/gynecologists	...	---	---	---	---	---	---	---	---	---	[29,30]---	---	60%
		Internists	1992	30%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Family physicians	1992	15%	...	...	...	---	---	---	---	---	[29,30]---	---	60%
		Treatment/referral for vision problems													
		Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	---	---	60%
		Obstetricians/gynecologists	1992	35%	...	...	...	---	---	---	---	---	---	---	60%
		Internists	1992	63%	...	...	...	---	---	---	---	---	---	---	60%
		Family physicians	1992	54%	...	...	...	---	---	---	---	---	---	---	60%

See footnotes and key at end of table.

Table 17. Diabetes and Chronic Disabling Conditions objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Treatment/referral for hearing problems													
	Nurse practitioners	1992	30%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
	Obstetricians/gynecologists	1992	34%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
	Internists	1992	52%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
	Family physicians	1992	46%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	- - -	- - -	60%
	Prescription of mobility aids/modification of living environment to improve mobility													
	Nurse practitioners	1992	18%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29]25%	- - -	60%
	Obstetricians/gynecologists	1992	15%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Internists	1992	31%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Family physicians	1992	25%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Investigation of/referral for treatable causes of dementia													
	Nurse practitioners	1992	31%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29]28%	- - -	60%
	Obstetricians/gynecologists	1992	27%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Internists	1992	54%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Family physicians	1992	40%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Treatment/referral for urinary incontinence													
	Nurse practitioners	1992	31%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29]28%	- - -	60%
	Obstetricians/gynecologists	1992	56%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Internists	1992	37%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
	Family physicians	1992	31%	. . .	. . .	. . .	- - -	- - -	- - -	- - -	- - -	[29,30]- - -	- - -	60%
☐ 17.18	**Perimenopausal females counseled about estrogen replacement therapy**													
	Female 40–60 years	1994	80%	. . .	. . .	. . .	. . .	. . .	- - -	- - -	- - -	89%	- - -	90%
	Female 40–49 years	1994	76%	. . .	. . .	. . .	. . .	. . .	- - -	- - -	- - -	87%	- - -	90%
	Female 50–60 years	1994	83%	. . .	. . .	. . .	. . .	. . .	- - -	- - -	- - -	90%	- - -	90%
■ 17.19	**Worksites with policies for hiring people with disabilities**[32]													
	Worksites with a voluntary policy	1986	37%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%
☐ 17.20	**Service systems for children with or at risk of chronic and disabling conditions** (number of States)	. . .	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	50
▨ 17.21	**Prevalence of peptic ulcer** (per 1,000)[33]													
	People 18 years and over	1991	19.9	. . .	. . .	23.7	24.4	23.0	22.0	21.2	†30.4	†27.7	- - -	18
☐ 17.22*	**Identify gaps in health data**	1990	None identified	- - -	- - -	- - -	- - -	[34]- - -	[35]- - -	[36]- - -	[36]- - -	[37]- - -	[37]- - -	. . .
	Establish mechanisms to meet needs	1990	None established	- - -	- - -	- - -	- - -	[34]- - -	[35]- - -	[36]- - -	[36]- - -	[37]- - -	[37]- - -	. . .
☐ 17.23	**People with diabetes who had a dilated eye exam in the past year**													
	People 18 years and over	1989	49%	- - -	[24]52%	- - -	- - -	- - -	- - -	- - -	- - -	53%	- - -	70%

- - - Data not available.
. . . Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

[§] Baseline has been revised.
[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.
[1] Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See Appendix.
[2] Estimate derived from 1991–93 health status data and 1992 mortality data.
[3] Years of healthy life remaining for those surviving to age 65.
[4] 1988–90 data.
[5] 1989–91 data.
[6] 1990–92 data.
[7] 1991–93 data.
[8] 1992–94 data.
[9] 1993–95 data.
[10] 1994–96 data.
[11] 1994–95 data.
[12] Data are unreliable. Relative standard error is greater than 30%.
[13] 1991–92 data.
[14] Excludes data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.
[15] 1986–89 data.
[16] 1990–93 data.
[17] 1991–94 data.
[18] 1992–95 data.
[19] 1993–96 data.
[20] 1995–98 data.
[21] Data are for people 20 years and over.
[22] Crude data from 1988–94.
[23] 1988–94 data.
[24] 1988–91 data.
[25] Estimate derived from self-reported height and weight.
[26] Data are for people 18–64 years.
[27] Operational definition changed from previous tracking data.
[28] 1989 data.
[29] 1997–98 data.
[30] Response rate for this group was too low to produce reliable estimates.
[31] Among hearing-impaired children 4–6 years.
[32] Assuming full compliance, achieved through passage of the Americans with Disabilities Act of 1990.
[33] Includes stomach, duodenal, and peptic ulcers.
[34] The National Committee on Vital and Health Statistics established a Subcommittee on State and Community Health Statistics. The Subcommittee's charge (in part) is to work with Federal and State agencies and appropriate private agencies to review and identify gaps in current health statistics.
[35] The *Healthy People 2000 Midcourse Review* added 111 additional subobjectives for major population groups at highest risk for disease, injury, and disability.
[36] As part of the planning process for 2010, data gaps are being identified and mechanisms to address these gaps are being considered.
[37] *Healthy People 2010* is addressing data gaps by requiring data for race, ethnicity, socioeconomic status, and disability measures for population-based objectives and by listing developmental objectives.

NOTE: Data may include revisions and, therefore, may differ from data previously published.

Objective number	*Data source*
17.1*, 17.1a–c	National Vital Statistics System, CDC, NCHS; National Health Interview Survey, CDC, NCHS.
17.2, 17.2a–c	National Health Interview Survey, CDC, NCHS.
17.3*, 17.3a, b	National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.
17.4	National Health Interview Survey, CDC, NCHS.
17.5	National Health Interview Survey, CDC, NCHS.
17.6, 17.6a	National Health Interview Survey, CDC, NCHS.
17.7, 17.7a	National Health Interview Survey, CDC, NCHS.
17.8*	Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH. Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH.
17.9, 17.9a, b	National Vital Statistics System, CDC, NCHS.

Objective number	*Data source*
17.10	For blindness: Massachusetts Blind Registry, Massachusetts Commission on the Blind. For perinatal mortality and congenital malfunctions: Clinical series and selected State data. For ESRD: Denominator: National Health Interview Survey, CDC, NCHS; Numerator: United States Renal Data System, NIH. For amputation: Denominator: National Health Interview Survey, CDC, NCHS; Numerator: National Hospital Discharge Survey, CDC, NCHS.
17.10a	Denominator: National Health Interview Survey, CDC, NCHS; Numerator: United States Renal Data System, NIH.
17.10b	IHS, OPEL.
17.10c	Denominator: National Health Interview Survey, CDC, NCHS; Numerator: National Hospital Discharge Survey, CDC, NCHS.
17.11*, 17.11e	National Health Interview Survey, CDC, NCHS.
17.11a	Ambulatory Utilization Data, IHS.
17.11b–d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
17.12*, 17.12a, b, f, g	National Health and Nutrition Examination Survey, CDC, NCHS.
17.12c, h	Data for Hispanic: National Health Interview Survey, CDC, NCHS. Baselines for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
17.12d	Baseline: IHS, OPEL. Updates: National Health Interview Survey, CDC, NCHS.
17.12e	National Health Interview Survey, CDC, NCHS.
17.13*, 17.13a	National Health Interview Survey, CDC, NCHS.
17.14a	1983–84 baseline: Halpern M. The impact of diabetes education in Michigan. Diabetes 38(2):151A, 1989. 1991 baseline and updates: National Health Interview Survey, CDC, NCHS.
17.14b	National Health Interview Survey, CDC, NCHS.
17.15	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
17.16	1988 baseline: Annual Survey of Hearing Impaired Children and Youth, Commission on Education of the Deaf. 1991 baseline and updates: National Health Interview Survey, CDC, NCHS.
17.17	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
17.18	National Health Interview Survey, CDC, NCHS.
17.19	Baseline: Survey of Persons with Disability, International Center for the Disabled. Updates: Americans with Disabilities Act of 1990.
17.21	National Health Interview Survey, CDC, NCHS.
17.22*	Subcommittee on State and Community Health Statistics, NCVHS; CDC, NCHS; OPHS, ODPHP.
17.23	Baseline: National Health Interview Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.

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* Duplicate objective. See full text of objective following this table.

Diabetes and Chronic Disabling Conditions Objectives

17.1*: Increase years of healthy life to at least 65 years.

Duplicate objectives: 8.1 and 21.1

17.1a*: Increase years of healthy life among blacks to at least 60 years.

Duplicate objectives: 8.1a and 21.1a

17.1b*: Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 8.1b and 21.1b

17.1c*: Increase years of healthy life among people aged 65 and older to at least 14 more years of healthy life.

Duplicate objectives: 8.1c and 21.1c

17.2: Reduce to no more than 8 percent the proportion of people who experience a limitation in major activity due to chronic conditions.

17.2a: Reduce to no more than 15 percent the proportion of low-income people (annual family income of less than $10,000 in 1988) who experience a limitation in major activity due to chronic conditions.

17.2b: Reduce to no more than 11 percent the proportion of American Indians and Alaska Natives who experience a limitation in major activity due to chronic conditions.

17.2c: Reduce to no more than 9 percent the proportion of blacks who experience a limitation in major activity due to chronic conditions.

17.2d: Reduce to no more than 10 percent the proportion of Puerto Ricans who experience a limitation in major activity due to chronic conditions.

17.3*: Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13 and age-related objective for people aged 65 and older

17.3a*: Reduce to no more than 325 per 1,000 people the proportion of all people aged 85 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13a

17.3b*: Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13b

17.4: Reduce to no more than 10 percent the proportion of people with asthma who experience activity limitation.

17.4a: Reduce to no more than 19 percent the proportion of blacks with asthma who experience activity limitation.

17.4b: Reduce to no more than 22 percent the proportion of Puerto Ricans with asthma who experience activity limitation.

17.5: Reduce activity limitation due to chronic back conditions to a prevalence of no more than 19 per 1,000 people.

17.6: Reduce significant hearing impairment to a prevalence of no more than 82 per 1,000 people.

17.6a: Reduce significant hearing impairment among people aged 45 and older to a prevalence of no more than 180 per 1,000.

17.7: Reduce significant visual impairment to a prevalence of no more than 30 per 1,000 people.

17.7a: Reduce significant visual impairment among people aged 65 and older to a prevalence of no more than 70 per 1,000.

17.8*: Reduce the prevalence of serious mental retardation among school-aged children to no more than 2 per 1,000 children.

Duplicate objective: 11.2

17.9: Reduce diabetes-related deaths to no more than 34 per 100,000.

17.9a: Reduce diabetes-related deaths among blacks to no more than 58 per 100,000.

17.9b: Reduce diabetes-related deaths among American Indians and Alaska Natives to no more than 48 per 100,000.

17.9c: Reduce diabetes-related deaths among Mexican-Americans to no more than 50 per 100,000.

17.9d: Reduce diabetes-related deaths among Puerto Ricans to no more than 42 per 100,000.

17.10: Reduce the most severe complications of diabetes as follows:

Complications among people with diabetes:	2000 target
End-stage renal disease	1.4 per 1,000
Blindness	1.4 per 1,000
Lower extremity amputation	4.9 per 1,000
Perinatal mortality[1]	2 percent
Major congenital malformation	4 percent

[1] Among infants of women with established diabetes.

17.10a: Reduce end-stage renal disease due to diabetes among black persons with diabetes to no more than 2 per 1,000.

17.10b: Reduce end-stage renal disease due to diabetes among American Indians and Alaska Natives with diabetes to no more than 1.9 per 1,000.

17.10c: Reduce lower extremity amputations due to diabetes among blacks with diabetes to no more than 6.1 per 1,000.

17.11*: Reduce diabetes to an incidence of no more than 2.5 per 1,000 people and a prevalence of no more than 25 per 1,000 people.

Duplicate objective: 2.24

17.11a*: Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 2.24a

17.11b*: Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24b

17.11c*: Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24c

17.11d*: Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24d

17.11e*: Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24e

17.12*: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

Duplicate objectives: 1.2, 2.3, and 15.10

17.12a*: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 15.10a

17.12b*: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 15.10b

17.12c*: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 15.10c

17.12d*: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 15.10d

17.12e*: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 15.10e

17.12f*: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 2.3f, and 15.10f

17.12g*: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 2.3g, and 15.10g

17.12h*: Reduce overweight to a prevalence of no more than 35 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 15.10h

17.13*: Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light-to-moderate physical activity for at least 30 minutes per day.

Duplicate objectives: 1.3 and 15.11

17.13a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 15.11a

17.14: Increase to at least 40 percent the proportion of people with chronic and disabling conditions who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

17.14a: Increase to at least 75 percent the proportion of people with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

17.14b: Increase to at least 50 percent the proportion of people with asthma who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

17.14c: Increase to at least 75 percent the proportion of blacks with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

17.14d: Increase to at least 75 percent the proportion of Hispanics with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

17.15: Increase to at least 80 percent the proportion of providers of primary care for children who routinely refer or screen infants and children for impairments of vision, hearing, speech and language, and assess other developmental milestones as part of well-child care.

17.16: Reduce the average age at which children with significant hearing impairment are identified to no more than 12 months.

17.16a: Reduce the average age at which black children with significant hearing impairment are identified to no more than 12 months.

17.17: Increase to at least 60 percent the proportion of providers of primary care for older adults who routinely evaluate people aged 65 and older for urinary incontinence and impairments of vision, hearing, cognition, and functional status.

17.18: Increase to at least 90 percent the proportion of perimenopausal women who have been counseled about the benefits and risks of estrogen replacement therapy (combined with progestin, when appropriate) for prevention of osteoporosis.

17.19: Increase to at least 75 percent the proportion of worksites with 50 or more employees that have a policy or program for the hiring of people with disabilities.

17.20: Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101–239.

17.21: Reduce the prevalence of peptic ulcer disease to no more than 18 per 1,000 people aged 18 and older by preventing its recurrence.

17.22*: Develop and implement a national process to identify significant gaps in the Nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs.

Duplicate objective: 22.4

17.23: Increase to 70 percent the proportion of people with diabetes who have an annual dilated eye exam.

*Duplicate objective.

Priority Area 18 HIV Infection

Background

The epidemic of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) presents social, economic, and public health challenges to individuals in the United States and globally. Although significant progress has been made in understanding the disease and developing both prevention strategies and treatments since the first AIDS case was discovered in the United States in 1981, HIV remains a deadly infection for which there are only limited treatments; no vaccine or cure exists. HIV/AIDS has been reported in virtually every racial and ethnic group, every age group, and every socioeconomic group in every State and most large cities in the United States. Since the early 1980s four distinct populations have been identified to be at greatest risk: men who have sex with men (MSM); injection drug users (IDUs); heterosexual persons in certain racial and ethnic populations (African Americans and Hispanics); and infants who are susceptible to perinatal transmission caused by undetected or untreated HIV infection in pregnant women (1–3). The proportion of different population groups affected by HIV/AIDS has changed over time. Comparing the 1980s to the 1990s, the proportion of AIDS cases among white MSM declined while the proportion of AIDS cases among women and men increased in select racial and ethnic groups, especially among African Americans and Hispanics. Moreover, increases among all women have occurred. Reported AIDS cases among women have increased steadily since the 1980's and accounted for nearly 18 percent of cases reported in 1999 (4). By the end of 1999, more than 733,000 cases of AIDS had been reported, and over 430,000 persons had died of AIDS. Estimates of the number of people infected with HIV in the United States range from 800,000 to 900,000. (4–6). Transmission of HIV infection can be prevented through changes in high-risk behaviors. Prevention is an important cost-effective component of the control of HIV infection. Two biomedical interventions have demonstrated possibilities in reducing the spread of this deadly disease. First, antiretroviral combination therapy lowers viral load, which may translate to lower infectivity and, second, evidence suggests that treatment of other sexually transmitted diseases (STDs) can reduce the spread of heterosexually transmitted HIV infection. Despite advances in prevention and medical treatment to improve survival among infected persons, HIV infection remains a major public health threat in the United States.

Data Summary

Highlights

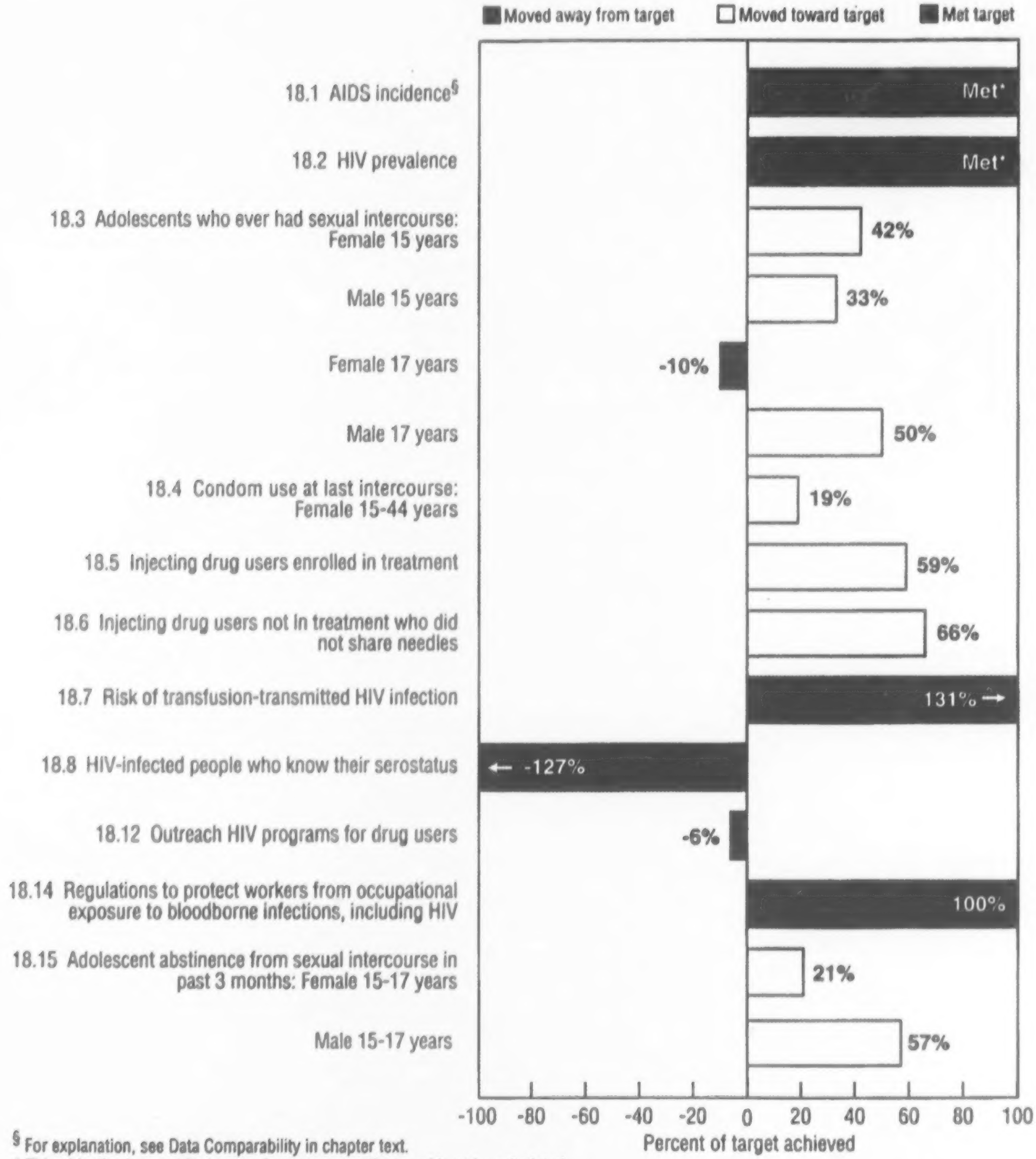
By the end of the 20th century, successes had been achieved in the HIV Infection priority area. The publication, dissemination, and implementation of specific guidelines to test donated blood for HIV has resulted in a reduction in transfusion-related AIDS (**18.7**). The estimated risk of transfusion-transmitted HIV dropped from 1 case per 40,000–150,000 units of donated blood in 1989 to 1 per 625,000 units in 1997. Assuming full compliance with the Occupational Safety and Health Administration bloodborne pathogen standard promulgated in 1991, 100 percent of worksites had regulations to protect workers from occupational exposure to bloodborne infections, including HIV (**18.14**) (5,7). Several other measures related to HIV infection status improved over the decade. For example, AIDS incidence continues to decrease and has met its year 2000 target. The estimated number of AIDS cases per 100,000 population by year of diagnosis decreased between 1997 and 1998 (**18.1**) (see Data Issues). The number of cases diagnosed in 1998 among MSM (**18.1a**) and IDUs (**18.1c**) also decreased compared with the number of cases in 1997. Since 1992, HIV incidence in the United States has been relatively stable, with an estimated 40,000 new HIV infections expected to occur each year. The latest estimates of HIV infection (**18.2**) indicated that 800,000 to 900,000 persons are infected with HIV (4–6).

In 1999, among in-school male and female adolescents 15 years of age, 34 and 43 percent, respectively, engaged in sexual intercourse (**18.3**), whereas 68 percent among black adolescent males in this age group engaged in sexual intercourse. Among 17 year olds, the proportion of adolescents engaging in sexual intercourse decreased in all groups (44 percent, 40 percent, and 82 percent, respectively). In addition, the proportion of condoms used at last sexual intercourse by the partners of sexually active unmarried females 15–44 years of age (**18.4**) increased from 19 percent to 25 percent between 1988 and 1995. Between 1997 and 1999, the proportion of in-school sexually active females (15–17 years of age) abstaining from sexual intercourse for the previous 3 months (**18.15**) improved from 23 percent to 25 percent. About a quarter of a million people in the United States are unaware that they are infected with AIDS (8); knowledge of serostatus is key to HIV-positive people benefiting from prevention and treatment. The proportion of HIV-positive persons who knew their serostatus (**18.8**) decreased over the decade. Between 1995 and 1998, the proportion of individuals who tested positive for HIV infection and returned for counseling decreased from 83 percent to 63 percent. Some 78 percent of persons who were tested at a publicly funded site completed posttest counseling sessions in 1998 (8). Knowledge of HIV status is a critical prevention strategy and essential for entry into care services. Once rapid HIV tests are available, test results can be provided in the same day, eliminating the need for a person to return for test results.

Summary of Progress

Data to assess progress are available for 14 of the 17 objectives in this priority area. Five objectives have met (**18.10**, and **18.14**) or exceeded (**18.1**, **18.2**, and **18.7**) the year 2000 targets. Objective **18.10** (HIV and other STD education curricula) was met at baseline, however, supplemental data for the objective indicate a trend that could be moving in the wrong direction. Data show progress toward the year 2000 targets for an additional five objectives (**18.4**, **18.5**, **18.6**, **18.13**, and **18.15**). Objectives **18.8**, **18.9**, and **18.12** moved away from the year 2000 targets. For one objective (**18.3**), progress among the multiple measures used for tracking was mixed. Data beyond baseline are not available for assessing the status of two objectives (**18.11** and **18.16**). Baseline data are not available for one objective (**18.17**). See table 18 for the tracking data for the objectives in this priority

Figure 18. Final status of HIV Infection objectives



§ For explanation, see Data Comparability in chapter text.

* This objective has met its target. A progress quotient could not be calculated.

NOTES: Complete tracking data are shown in table 18. Progress quotients are not calculated for objectives 18.9, 18.10, 18.11, 18.13, 18.16, and 18.17. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
AIDS is aquired immunodeficiency syndrome. HIV is human immunodeficiency virus.

area and figure 18 for a quantitative assessment of progress.

Discussion

Historically, AIDS incidence data have served as the basis for assessing needs for prevention and treatment programs. However, because of the effect of potent antiretroviral therapies, AIDS incidence no longer can provide unbiased information on HIV incidence patterns. Rather, persons reported with AIDS will increasingly represent persons who were diagnosed too late for them to benefit from treatments, persons who either did not seek or had no access to care, or persons who failed treatment (4,5). A nationwide system of HIV reporting is needed to better track where HIV infections are occurring. By the end of 1999, 34 States had adopted some type of HIV reporting for adults and adolescents. AIDS incidence rates for minority populations, particularly African Americans and Hispanics, continue to increase, revealing the continuing trend of racial minority groups being disproportionately impacted by the epidemic. In 1998, an estimated 17,847 AIDS cases were diagnosed among MSM (**18.1a**). This was a decrease from 1997 and part of a continuing trend. The decline is a result of prevention activities and the impact of and access to potent antiretroviral therapies that are delaying progression to AIDS in many HIV-infected individuals. During the next decade, increased emphasis will be placed on increasing the number of people who know their HIV serostatus. For HIV-infected persons and those not infected but at increased risk for HIV, linkages with appropriate medical, prevention, and other supportive services increases the likelihood of maintaining health, enhancing longevity and quality of life, and reducing the risk of transmitting or acquiring HIV. Thus, learning one's status is an important element of prevention.

In the 21st century, strategies for reducing HIV transmission will continue to evolve. Future strategies will continue to focus on the disproportionate impact of HIV/AIDS among certain racial/ethnic groups; prevention strategies for populations that are particularly high risk (for example, IDUs and incarcerated persons); increasing the number of persons who learn their HIV status; and providing access to highly active antiretroviral therapy (HAART), thereby reducing deaths and HIV-associated illnesses and infections of others. The effect of treatment on AIDS incidence and the shift in emphasis from AIDS to HIV require new ways of thinking about surveillance data. With respect to AIDS data, year-to-year changes reflect differences in the historic pattern of HIV infection and differences in access to and utilization of care. Until the estimated proportion of new HIV diagnoses is available, the number and characteristics of persons living with diagnosed HIV infection and those living with AIDS will be helpful in planning for prevention, treatment, and other services needed to further reduce transmission and to improve survival and quality of life for infected persons. The next few years will represent a time of transition. AIDS incidence will continue to be affected by therapy; at the same time, HIV reporting will gradually be implemented by an increasing number of States (4,5,9).

Transition to *Healthy People 2010*

The HIV Infection focus area was changed for *Healthy People 2010* to reflect improvements in HIV/AIDS treatment, surveillance, and medical knowledge. In order to better track the rise in incidence of AIDS cases in particular populations in the United States, the AIDS incidence objective in *Healthy People 2000* has been expanded into five separate objectives in *Healthy People 2010*: AIDS incidence for adolescents and adults (13 years of age and older), AIDS cases among MSM, AIDS cases among persons who inject drugs (IDUs), and AIDS cases among men who have sex with men and who also inject drugs. A developmental objective, adapted from *Healthy People 2000*, is included in *Healthy People 2010* that will monitor new cases of HIV infection among the adolescent and adult population. This objective is expected to be tracked once HIV case surveillance is implemented nationwide.

There is an objective modified from *Healthy People 2000* to monitor the proportion of substance abuse treatment facilities that offer HIV/AIDS education, counseling, and support. Two new objectives were developed to track HIV/AIDS activities among the incarcerated population, including comprehensive HIV/AIDS, STD, and TB education and voluntary HIV counseling and testing. An additional two objectives to track tuberculosis among HIV-positive persons and another to track perinatally acquired HIV infection were added.

As new therapies continue to be developed and as more people with HIV/AIDS are living longer lives, HIV-infected persons need access to life-enhancing treatments. Therefore, an objective regarding treatment guidelines was added to *Healthy People 2010* to reflect the need for equal access to appropriate care and treatment services to maintain a healthy life. New objectives on AIDS-related deaths, the interval between HIV infection and AIDS diagnosis, and the interval between AIDS diagnosis and death from AIDS were developed to identify populations who are not benefitting from current treatment therapies and to guide where to direct resources.

There is a modification of the *Healthy People 2000* objective that tracks the proportion of positive HIV tests for which persons return for counseling. This modified measure in *Healthy People 2010* will track the number of HIV-positive persons who know their serostatus.

The *Healthy People 2000* objective on sexual activity and abstinence in the past 3 months among adolescents is split into two objectives in *Healthy People 2010*: Focus Area 25, Sexually Transmitted Diseases has an objective to increase the proportion of adolescents, grades 9–12, who abstain from sexual intercourse or use condoms if currently sexually active and Focus Area 13, HIV Infection has an objective to increase the proportion of sexually active persons, 18–44 years of age, who use condoms. These objectives were included in 1 of the 10 Leading Health Indicators for *Healthy People 2010*, Responsible Sexual Behavior.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

In January 1993, an expanded AIDS case (**18.1**) definition was implemented for the HIV/AIDS Surveillance System (6). The expanded definition added pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer to the list of diseases that indicate that AIDS has fully developed among HIV-infected people (6). In addition, the new definition included HIV-infected people with a CD4 cell count below 200 cells per microliter of blood, regardless of whether those persons have opportunistic infections, neoplasms, or any other symptoms of HIV infection. These changes resulted in cases being diagnosed earlier in the course of the disease and effected a temporary increase in the number of cases reported after January 1, 1993. The expanded definition increased the number of cases diagnosed in 1992 and 1993 because it applied to cases diagnosed in earlier years if they were reported after the expanded definition was implemented in 1993. The decline in 1994 and 1995 represented the continued but waning effect of the change in AIDS reporting criteria. In 1995, the Centers for Disease Control and Prevention (CDC) published estimates of the incidence of cases of AIDS opportunistic illnesses (including HIV dementia and wasting syndrome) by year of diagnosis (10). This improved comparability for trend purposes. In 1999, CDC published recommendations for a nationwide system for reporting cases of HIV infection (5). The expansion of the surveillance system to include all persons who have been diagnosed with HIV will enhance knowledge of the scope and impact of the epidemic.

The National Household Survey on Drug Abuse (NHSDA) provides updates to monitor objective **18.5** on the proportion of injecting drug users in the past year who were enrolled in any drug abuse treatment program in the past year (11). For 1991 through 1993, persons defined as IDUs in the past year were those who used any drug with a needle for nonmedical reasons. For 1994, persons defined as IDUs in the past year were those who used a needle to inject cocaine, heroin, a stimulant, or an anabolic steroid in the past year. For 1995, persons defined as IDUs in the past year were those who used a needle to inject cocaine, heroin, or a stimulant in the past year. Enumeration of IDUs is difficult because of the illegality of the behavior. Therefore, the number of IDUs may be underestimated using this data source. In addition, the NHSDA will miss an unknown proportion of injecting drug users who are homeless, institutionalized, or difficult to locate. The NHSDA data are not comparable to the baseline measure, which was estimated from various sources.

Recent data on the proportion of IDUs not in treatment who use uncontaminated injecting equipment (**18.6**) are available from the Cooperative Agreement for AIDS Community-Based Outreach and Intervention Research Program from the National Institute on Drug Abuse (NIDA). Baseline data were from a similar research project, the National AIDS Demonstration Research Program, also from NIDA. Data from both data sources are from selected cities and are not nationally representative. The measure to monitor this objective is the proportion of current injecting drug users who did not share needles during the last 30 days. Injecting drug users are newly recruited study participants who report injecting drugs during the past 30 days and whose drug-using behavior is confirmed by observation of track marks or positive urine tests.

Data Sources

Data for objective **18.1** on the number of AIDS cases by year of diagnosis are available from the CDC's HIV/AIDS Surveillance System and are adjusted for both delayed and incomplete reporting (12). Data on AIDS cases are more often published by year of report than by year of diagnosis. Approximately 20 percent of AIDS cases are reported more than a year after diagnosis. The estimated number of AIDS cases by year of diagnosis changes as new data become available because AIDS cases diagnosed in previous years continue to be reported and because the adjustment factor for delays in reporting changes as new data become available. The adjustment factor for underreporting is based on the assumption that 90 percent of all AIDS cases are eventually reported (13). *Healthy People 2000* data from this surveillance system cover the 50 States and the District of Columbia only. The data usually published by the AIDS Surveillance System also include United States dependencies, possessions, and nations in free association with the United States.

The baseline data on counseling to prevent HIV and other STD's for objective **18.9** are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on counseling refer to the proportion of providers who routinely delivered these services to 81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data for objective **18.16** are from the CDC-sponsored Worksite Benchmark Survey, which was a telephone survey of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Active methods (for example, classes) were counted as worksite health promotion activities; passive methods (for example, brochures) were not included (14,15).

Data Comparability

Beginning with data for 1996, the incidence of AIDS cases (**18.1**) is computed for the age group 13 years and over. For previous years, the age group 18 years and over was used. In addition, the methodology for determining AIDS incidence has changed. Because of the impact of new combination therapies, researchers can no longer reliably predict the number of people who will be diagnosed with AIDS opportunistic infections each year. There is no longer a way to determine the length of time it takes an infected individual on treatment to develop an opportunistic infection because treatment has slowed the progression of disease for many individuals and the duration of the effects of these drugs are not certain. Moreover, after 1996, AIDS incidence will no longer provide an indication of trends in HIV transmission. Therefore, estimates of AIDS incidence from 1986 to 1996 are presented to assess the direction of the epidemic before the impact of new combination therapies. Also beginning with 1996 data, the number of AIDS cases for MSM's excludes those who were also IDU's and the number of cases of IDU's excludes those who also were MSM's. In 1996, the number of AIDS cases among those who were both IDU's and MSM's was 2,680.

Baseline and 1995 data for "all females" for objective **18.3** (adolescent postponement of sexual intercourse), for females 15–44 years of age and 15–19 years of age for objective **18.4** (condom use at last sexual intercourse), and for "all females" for objective **18.15** (adolescent abstinence) are from the NSFG. Baseline and 1995 data for "all males" for these objectives are from the National Survey of Adolescent Males (NSAM). Biennial tracking data from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or the targets. The YRBS is a school-based survey and thus does not include teenagers who are not in school and who are potentially at higher risk of these behaviors (16). YRBS data, shown by age in this report, are published by grade only in other publications. (See text for Priority Area 5 for more information.)

The update for objective **18.7** comes from Lackritz et al., who obtained data from the American Red Cross on donations collected between January 1992 through December 1993 (17). The more sensitive screening enzyme immunosorbent assay antibody test introduced in 1992 is one possible reason for the estimated risk decreasing remarkably between 1990 and 1992–93.

Proxy Data

Objective **18.8** targets an increase in the proportion of HIV-infected people who know their serostatus. A reported posttest counseling session from a publicly funded site is used as a measure for knowledge of serostatus. This objective is being measured by the percent of positive HIV tests for which tested people returned for counseling. Some people who were tested and returned for counseling may have had more than one test during the year. CDC believes that because of numerous operational difficulties, posttest counseling is under-reported by publicly funded sites. These numbers, therefore, are probably an underestimate, and represent the lowest possible percent.

Data Availability

No national data are routinely available that directly measure HIV seroprevalence among the general population (**18.2**). Estimates of the prevalence of HIV infection in the U.S. population as a whole are based on mathematical models using back calculation, a statistical method that estimates the number of prior HIV infections that would account for the number of AIDS cases that have subsequently occurred (12) as well as serostatus data from the Survey on Childbearing Women and from the National Health and Nutrition Examination Survey III (18,19). Nationally representative estimates of HIV seroprevalence among high-risk groups are not available. Information on the proportion infected among men who have sex with men and injecting drug users has been obtained from seroprevalence studies conducted in clinical settings as part of a sentinel surveillance system conducted by CDC in collaboration with State and local health departments (20). The surveillance system covers various clinical settings in selected metropolitan areas. Seroprevalence estimates for men who have sex with men are based on anonymous surveys conducted in STD clinics. For injecting drug users, estimates are based on surveys among drug users entering treatment programs. Clients attending STD clinics and drug treatment programs are not representative of all persons with these high-risk behaviors.

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Table 18. HIV infection objectives

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	18.1 **Slow the rise in incidence of AIDS cases** (per 100,000 population 18 years and over)	1989	17.0	20.9	25.2	33.1	32.8	29.8	28.6	[1]27.8	[1]23.1	[1]19.5	---	43
	a. Men who have sex with men (number of cases)	1989	27,000	28,574	34,005	42,706	39,326	34,146	30,696	[1,2]23,420	[1,2]21,341	[1,2]17,847	---	48,000
	b. Black (non-Hispanic)	1989	44.4	59.0	73.0	100.8	107.8	102.9	100.5	[1]110.9	[1]98.1	[1]82.9	---	136
	c. Hispanic	1989	34.9	33.1	39.9	51.5	53.7	49.4	47.1	[1]48.4	[1]40.5	[1]33.0	---	76
	d. Female	1989	3.5	5.3	6.9	9.9	11.1	10.9	11.2	[1]11.6	[1]10.4	[1]8.8	---	13
	e. Injecting drug users (number of cases)	1989	10,300	12,468	15,696	21,899	23,399	20,734	19,100	[1,3]15,583	[1,3]15,697	[1,3]12,099	---	25,000
■	18.2 **Slow the rise in prevalence of HIV infection** (per 100,000 population 13 years and over)	1989	400	400	---	310–420	---	---	---	---	---	---	---	400
	a. Men who have sex with men (15 years and over)[4]	1989	[5]15,000–61,800	17,400–60,900	---	[5]3,900–47,400	---	---	---	---	---	---	---	20,000
	b. Injecting drug users (15 years and over)[6]	1989	[5]0–48,200	0–49,300	---	[5]600–52,900	---	---	---	---	---	---	---	40,000
	c. Females giving birth to live-born infants (15–44 years)	1989	160	160	170	170	160	160	---	---	---	---	---	100
☐	18.3* **Adolescents who ever engaged in sexual intercourse**													
	Adolescents 15 years													
	All females	1988	27%	---	---	---	---	---	22%	---	---	---	---	15%
	In-school females	...	---	35%	36%	---	37%	---	38%	---	44%	---	43%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	---	---	15%
	In-school males	...	---	48%	44%	---	45%	---	42%	---	42%	---	34%	...
	a. All black males	1988	69%	---	---	---	---	---	58%	---	---	---	---	15%
	In-school non-Hispanic black males	...	---	---	79%	---	82%	---	77%	---	75%	---	68%	...
	Adolescents 17 years													
	All females	1988	50%	---	---	---	---	---	51%	---	---	---	---	40%
	In-school females	...	---	62%	66%	---	66%	---	67%	---	62%	---	40%	...
	All males	1988	66%	---	---	---	---	---	53%	---	---	---	---	40%
	In-school males	...	---	73%	68%	---	68%	---	65%	---	60%	---	44%	...
	b. All black males	1988	90%	---	---	---	---	---	79%	---	---	---	---	40%
	In-school non-Hispanic black males	...	---	---	90%	---	92%	---	88%	---	85%	---	82%	...
	c. All black females 15–17 years	1988	66%	---	---	---	---	---	[7]48%	---	---	---	---	40%
	In-school non-Hispanic black females	...	---	---	84%	---	80%	---	75%	---	73%	---	73%	...
☐	18.4* **Condom use at last sexual intercourse**													
	Sexually active unmarried females 15–44 years (by their partners)	1988	19%	---	---	---	---	---	25%	---	---	---	---	50%

See footnotes and key at end of table.

Table 18. HIV infection objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		a. Sexually active females 15–19 years (by their partners)	1988	26%	---	---	---	---	---	37%	---	---	---	---	60%
		Sexually active females 15–19 years in grades 9–12 (by their partners)	...	---	40%	38%	---	46%	---	49%	---	51%	---	51%	...
		b. Sexually active males 15–19 years	1988	57%	---	---	---	---	---	---	---	---	---	---	75%
		Sexually active males 15–19 years in grades 9–12	...	---	49%	54%	---	59%	---	61%	---	63%	---	66%	...
		c. Injecting drug users	1992	[8]34%	...	...	...	---	---	---	---	---	---	---	75%
		d. Black female 15–44 years (by their partners)	1988	12.4%	---	---	---	---	---	[7]25%	---	---	---	---	75%
☐	18.5	**Injecting drug users enrolled in treatment**	1989	11%	---	28.7%	29.8%	45.9%	47.8%	34.1%	---	---	---	---	50%
☐	18.6	**Injecting drug users not in treatment who did not share needles** (in previous 30 days)	1991	30.8%	...	...	---	[9]57.7%	[10]60.6%	[11]60.0%	---	---	---	---	75%
■	18.7	**Risk of transfusion-transmitted HIV infection** (per units of blood)	1989	1 per 40,000–150,000	1 per 221,000	---	---	[12]1 per 450,000–660,000	---	---	---	1 per 625,000	---	---	1 per 250,000
▨	18.8	**HIV-infected people who know their serostatus**													
		Percent of positive HIV tests for which people returned for counseling	1990	72.5%	...	---	---	---	---	83%	74%	---	63%	---	80%
▨	18.9*	**Clinician counseling to prevent HIV and other sexually transmitted diseases**	1987	[13]10%	---	---	---	---	---	---	---	---	---	---	75%
		Percent of clinicians routinely providing service to 81–100% of patients													
		a. Providers practicing in high incidence areas	...	---	---	---	---	---	---	---	---	---	---	---	90%
		b. Family physicians	1992	27%	...	...	...	---	---	---	---	---	[14,15]...	---	75%
		c. Internists	1992	30%	...	...	...	---	---	---	---	---	[14,15]...	---	75%
		d. Nurse practitioners	1992	50%	...	...	...	---	---	---	---	---	[14]45%	---	75%
		e. Obstetricians/gynecologists	1992	46%	...	...	...	---	---	---	---	---	[14,15]...	---	75%
		f. Pediatricians	1992	46%	...	...	...	---	---	---	---	---	[14,15]...	---	75%
		g. Mental health care providers	...	---	---	---	---	---	---	---	---	---	---	---	75%
■	18.10*	**HIV and other STD education curricula**													
		Schools offering at least one STD class	1988	95%	---	---	---	---	---	---	---	---	---	---	95%
		Proportion of middle and senior high schools:													
		With HIV prevention in required courses	...	---	---	---	---	---	86%	---	---	---	---	---	

See footnotes and key at end of table.

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Table 18. HIV infection objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	With STD prevention in required courses	...	---	---	---	---	---	84%	---	---	---	---	---	...
☐	18.11* **HIV and STD education for students at colleges and universities**													
	Students 18 years and over given:													
	AIDS or HIV infection prevention information	1995	49.1%	...	...	...	...	...	...	---	---	---	---	90%
	STD prevention information	1995	43.4%	...	...	...	...	...	...	---	---	---	---	90%
	Students 18 years and over taught about AIDS or HIV in a college class	1995	41.4%	...	...	...	...	...	...	---	---	---	---	90%
■	18.12 **Outreach HIV programs for drug users** (cities with populations greater than 100,000)	1991	35%	...	...	32%	---	---	---	---	---	---	---	90%
☐	18.13 **Clinic services for HIV and other sexually transmitted diseases**	...	---	---	---	---	---	---	---	---	---	---	---	50%
	Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	---	---	...
	Title X funded family planning clinics													
	STD testing (excluding HIV)	...	---	---	---	---	---	95%	---	---	---	---	---	...
	STD counseling (excluding HIV)	...	---	---	---	---	---	98%	---	---	---	---	---	...
	STD treatment (excluding HIV)	...	---	---	---	---	---	93%	---	---	---	---	---	...
	Gonorrhea													
	Client testing[16]	...	---	97%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	82%	---	---	---	---	---	---	---	---	---	...
	Partner notification[17]	...	---	23%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	60%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	62%	---	---	---	---	---	---	---	---	---	...
	Syphilis													
	Client testing[16]	...	---	86%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	48%	---	---	---	---	---	---	---	---	---	...
	Partner notification[17]	...	---	29%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	57%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	40%	---	---	---	---	---	---	---	---	---	...
	Chlamydia													
	Client testing[16]	...	---	66%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	73%	---	---	---	---	---	---	---	---	---	...
	Partner notification[17]	...	---	15%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	29%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	50%	---	---	---	---	---	---	---	---	---	...
	HIV													
	Client pretest counseling	...	---	66%	---	---	---	82%	---	---	---	---	---	...
	Client testing	...	---	60%	---	---	---	74%	---	---	---	---	---	...

See footnotes and key at end of table.

Table 18. HIV Infection objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	18.14	**Regulations to protect workers from occupational exposure to bloodborne infections, including HIV**													
		Proportion of work places	1992	100%	...	...	...	100%	100%	100%	100%	100%	100%	100%	100%
☐	18.15*	**Adolescent abstinence from sexual intercourse for previous 3 months**													
		All sexually active females 15–17 years	1988	23.6%	---	---	---	---	---	27%	---	---	---	---	40%
		In-school sexually active females 15–17 years	...	---	24%	25%	---	25%	---	23%	---	23%	---	25%	...
		All sexually active males 15–17 years	1988	33%	---	---	---	---	---	37%	---	---	---	---	40%
		In-school sexually active males 15–17 years	...	---	30%	36%	---	33%	---	34%	---	32%	---	32%	...
☐	18.16	**Comprehensive HIV/AIDS workplace programs**													
		Proportion of businesses with policies, management training, and employee education:													
		Small businesses (15–49 employees)	1995	2%	...	...	...	...	...	...	---	---	---	---	10%
		Medium businesses (50–749 employees)	...	---	---	---	---	---	---	7%	---	---	---	---	...
		Large businesses (750 or more employees)	1995	25%	...	...	...	...	...	...	---	---	---	---	50%
		Proportion of businesses with policies:													
		Small businesses (15–49 employees)	...	---	---	---	---	---	---	18%	---	---	---	---	...
		Medium businesses (50–749 employees)	...	---	---	---	---	---	---	42%	---	---	---	---	...
		Large businesses (750 or more employees)	...	---	---	---	---	---	---	79%	---	---	---	---	...
		Proportion of businesses with management training:													
		Small businesses (15–49 employees)	...	---	---	---	---	---	---	18%	---	---	---	---	...
		Medium businesses (50–749 employees)	...	---	---	---	---	---	---	41%	---	---	---	---	...
		Large businesses (750 or more employees)	...	---	---	---	---	---	---	77%	---	---	---	---	...
		Proportion of businesses with employee education:													
		Small businesses (15–49 employees)	...	---	---	---	---	---	---	6%	---	---	---	---	...

See footnotes and key at end of table.

Table 18. HIV infection objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	Medium businesses (50–749 employees)	...	---	---	---	---	---	---	16%	---	---	---	---	...
	Large businesses (750 or more employees)	...	---	---	---	---	---	---	32%	---	---	---	---	...
	Federal government departments and agencies	1995	80%	...	...	...	...	...	...	---	---	---	---	100%
☐	18.17 **Linkages between substance abuse treatment programs and primary care clinics**													
	Federally funded primary care clinics	...	---	---	---	---	---	---	---	---	---	---	---	40%
	Federally funded substance abuse treatment programs	...	---	---	---	---	---	---	---	---	---	---	---	40%

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ▨ Away ☐ Cannot assess

[#] Baseline has been revised.

[1] Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.

[2] Beginning with 1996 data, excludes men who are also injecting drug users. See text for Priority Area 18.

[3] Beginning with 1996 data, excludes men who also had sex with men. See text for Priority Area 18.

[4] Range of clinic-specific HIV prevalence rates among men who have sex with men attending sexually transmitted disease clinics participating in CDC's National Serosurveillance Program.

[5] 1991–92 data.

[6] Range of clinic-specific HIV prevalence rates among injecting drug users attending sexually transmitted disease clinics participating in CDC's National Serosurveillance Program.

[7] Data are for non-Hispanic black females.

[8] Data are for male and female injecting drug users (married and unmarried) who report having vaginal sex within the last 6 months and reported using a condom "always" or "sometimes."

[9] Data are for January 1992 through April 1993.

[10] Data are for May 1993 through December 1995.

[11] Data are for January 1992 through July 1996.

[12] 1992–93 data.

[13] Data are for new patients only.

[14] 1997–98 data.

[15] Response rate for this group was too low to produce reliable estimates.

[16] Includes testing at initial visit, at annual visit, or if symptomatic.

[17] By family planning clinic staff via telephone or mail.

NOTES: Data include revisions and, therefore, may differ from data previously published in these reports and other publications. AIDS is acquired immunodeficiency syndrome. HIV is human immunodeficiency virus. STD is sexually transmitted disease.

Objective number	Data source
18.1, 18.1a–e	HIV/AIDS Surveillance System, CDC, NCHSTP.
18.2, 18.2a–c	Baseline and 1990 update: CDC, NCHSTP. 1992 update for total population: Karon JM, et. al. Prevalence of HIV infection in the United States, 1984 to 1992. JAMA 276(2):126–31. 1996.
18.3*	Baseline and updates for all females and all black females: National Survey of Family Growth, CDC, NCHS. Baseline and updates for all males and all black males: National Survey of Adolescent Males, NIH, NICHD. 1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4*, 18.4d	National Survey of Family Growth, CDC, NCHS.
18.4a	Baseline: National Survey of Family Growth, CDC, NCHS. 1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4b	Baseline: National Survey of Adolescent Males, NIH, NICHD.

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Objective number	*Data source*
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4c	National AIDS Demonstration Research Program, NIH, NIDA.
18.5	Baseline: NIH, NIDA.
	Updates: National Household Survey on Drug Abuse, SAMHSA, OAS.
18.6	Baseline: National AIDS Demonstration Research Program, NIH, NIDA.
	Updates: Cooperative Agreement for AIDS Community-based Outreach/Intervention Research Program, NIH, NIDA.
18.7	Baseline: American Association of Blood Banks.
	1990 update: Comprehensive Blood Donations Data Set, CDC, NCHSTP.
	1992–93 update: Lackritz EM, et al. Estimated risk of transmission of the human immunodeficiency virus by screened blood in the United States. NEJM 333(26):1721–5. 1995.
	1997 update: Busch MP and Kleinman SH. Nucleic acid amplification testing of blood donors for transfusion-transmitted infectious diseases. Transfusion 40:143–59. 2000.
18.8	HIV Counseling and Testing Data Sites System, CDC, NCHSTP.
18.9*	1987 baseline: Sexual history-taking and counseling practices of primary care physicians, Lewis CE and Freeman HE. Western Journal of Medicine 147: 165–7. 1987.
	1992 baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
18.10*	Baseline: AIDS education: Public school programs require more student information and teacher training. GAO, 1990.
	1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
18.11	National College Health Risk Behavior Survey, CDC, NCCDPHP.
18.12	CDC, NCHSTP.
18.13*	Baseline: State Family Planning Directors.
	1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA.
	1994 data: The Urban Institute. Family planning clinics: Current status and recent changes in services, clients, staffing and income sources. March 1994.
18.14	Occupational exposure to bloodborne pathogens; final rule (29 CFR 1910, 1030). Federal Register 56:64004–182. December 6, 1991.
18.15*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS.
	Baseline and update for all males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.16	Businesses: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
	Federal government: CDC.

* Duplicate objective. See full text of objective following this table.

HIV Infection Objectives

18.1: Confine annual incidence of diagnosed AIDS cases to no more than 43 per 100,000 population.

18.1a: Confine annual incidence of diagnosed AIDS cases among men who have sex with men to no more than 48,000 cases.

18.1b: Confine annual incidence of diagnosed AIDS cases among blacks to no more than 136 per 100,000 population.

18.1c: Confine annual incidence of diagnosed AIDS cases among Hispanics to no more than 76 per 100,000 population.

18.1d: Confine annual incidence of diagnosed AIDS cases among women to no more than 13 per 100,000 population.

18.1e: Confine annual incidence of diagnosed AIDS cases among injecting drug users to no more than 25,000.

18.2: Confine the prevalence of HIV infection to no more than 400 per 100,000 people.

18.2a: Confine the prevalence of HIV infection among men who have sex with men to no more than 20,000 per 100,000.

18.2b: Confine the prevalence of HIV infection among injecting drug users to no more than 40,000 per 100,000.

18.2c: Confine the prevalence of HIV infection among women giving birth to live-born infants to no more than 100 per 100,000.

18.3*: Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 19.9

18.3a*: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 5.4a and 19.9a

18.3b*: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4b and 19.9b

18.3c*: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4c and 19.9c

18.4*: Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

Duplicate objective: 19.10

18.4a*: Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10a

18.4b*: Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.

Duplicate objective: 19.10b

18.4c*: Increase to at least 75 percent the proportion of injecting drug users who used a condom at last sexual intercourse.

Duplicate objective: 19.10c

18.4d*: Increase to at least 75 percent the proportion of black women aged 15–44 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10d

18.5: Increase to at least 50 percent the estimated proportion of all injecting drug users who are in drug abuse treatment programs.

18.6: Increase to at least 75 percent the estimated proportion of active injecting drug users who use only new or properly decontaminated syringes, needles, and other drug paraphernalia ("works").

18.7: Reduce to no more than 1 per 250,000 units of blood and blood components the risk of transfusion-transmitted HIV infection.

18.8: Increase to at least 80 percent the proportion of HIV-infected people who know their serostatus.

18.9*: Increase to at least 75 percent the proportion of primary care and mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14

18.9a*: Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence, who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14a

18.9b*: Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14b

18.9c*: Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14c

18.9d*: Increase to at least 75 percent the proportion of nurse practitioners who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14d

18.9e*: Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14e

18.9f*: Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14f

18.9g*: Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14g

18.10*: Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that includes the way HIV and other STDs are prevented and transmitted.

Duplicate objective: 19.12

18.11*: Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 19.17

18.12: Increase to at least 90 percent the proportion of cities with populations over 100,000 that have outreach programs to contact drug users (particularly injecting drug users) to deliver HIV-risk-reduction messages.

18.13*: Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 5.11 and 19.11

18.14: Extend to all facilities where workers are at risk for occupational transmission of HIV regulations to protect workers from exposure to blood borne infections, including HIV infection.

18.15*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objectives: 5.5 and 19.16

18.16: Increase to at least 50 percent the proportion of large businesses and to 10 percent the proportion of small businesses that implemented a comprehensive HIV/AIDS workplace program. Increase to 100 percent the proportion of Federal Government departments and agencies that implemented a comprehensive HIV/AIDS workplace program.

18.17: Increase to at least 40 percent the number of federally funded primary care clinics that have formal established linkages with substance abuse treatment programs and increase to at least 40 percent the number of federally funded substance abuse treatment programs that have formal established linkages with primary care clinics.

*Duplicate objective.

Priority Area 19 Sexually Transmitted Diseases

Background

Sexually transmitted diseases (STDs) refer to the more than 25 infectious organisms transmitted primarily through sexual activity. STD rates have declined substantially in the United States since 1936 when programs for their prevention and control were established through collaborative efforts of Federal, State, and local health authorities. Throughout the 1990s, considerable progress was realized as programs continued and were expanded (1). Nevertheless, STDs remain at epidemic levels in this country, and the United States continues to record the highest STD rates in the industrialized world (2). STDs disproportionately affect women, infants, adolescents, and communities of color (1). Syphilis remains one of the most glaring examples of racial disparities in health; 1999 rates among African Americans were 30 times those among white Americans (3). Gonorrhea and chlamydia rates are highest among adolescents and young adults. More than 65 million Americans are currently living with an incurable viral STD such as genital herpes or human papillomavirus infection (HPV) (4). Overall, an estimated 15 million new cases of non-HIV STDs, such as syphilis, chlamydia, gonorrhea, herpes, hepatitis B, and HPV infection, occur at an annual direct and indirect cost of at least $10 billion. Approximately 25 percent of new STD cases occur among adolescents (2). These infections frequently cause severe, life-long consequences, especially among women, adolescents, and infants. The consequences of STDs include involuntary infertility, potentially fatal tubal pregnancy, other adverse pregnancy outcomes such as stillbirths and newborn (congenital) infections, increased risk of HIV transmission, and cervical and liver cancers (1).

STD transmission is sustained by the complex interaction of biological, social, and behavioral factors (1). For example, STDs are frequently asymptomatic or can be so mild as to be unrecognized by infected persons. This factor helps sustain transmission to others. Frequently there is a very long lag time between infection and complications such as cervical cancer (from HPV infection) or infertility (from chlamydia or gonorrhea). Often people do not recognize the connection between an earlier STD and a resulting health problem. Women are at higher risk than men for most STDs and often suffer more severe consequences (2). STDs disproportionately affect disenfranchised persons, especially those who are in social networks where high-risk sexual behaviors are common or access to high-quality health care is limited (5). Access to health care is essential for early detection, treatment, and behavior-change counseling for STDs. Groups with the highest rates of STDs are often the same groups in which access to health services is most limited. Complicating matters is the continued stigma associated with STDs and Americans' general discomfort with openly discussing intimate aspects of life, especially those related to sex. The latter two factors greatly impede efforts to change sexual behaviors on the part of parents, educators, and health care providers.

Because of the challenging dynamics of STD transmission, STD prevention efforts must use diverse, multifactorial interventions (1). Behavioral interventions are essential. They can help people abstain from sexual intercourse, delay initiation of intercourse, reduce the number of sex partners, and increase the use of effective physical barriers such as condoms. Biological interventions are equally important. They include screening, diagnosis, treatment, and early antimicrobial prophylaxis of sex partners.

Data Summary

Highlights

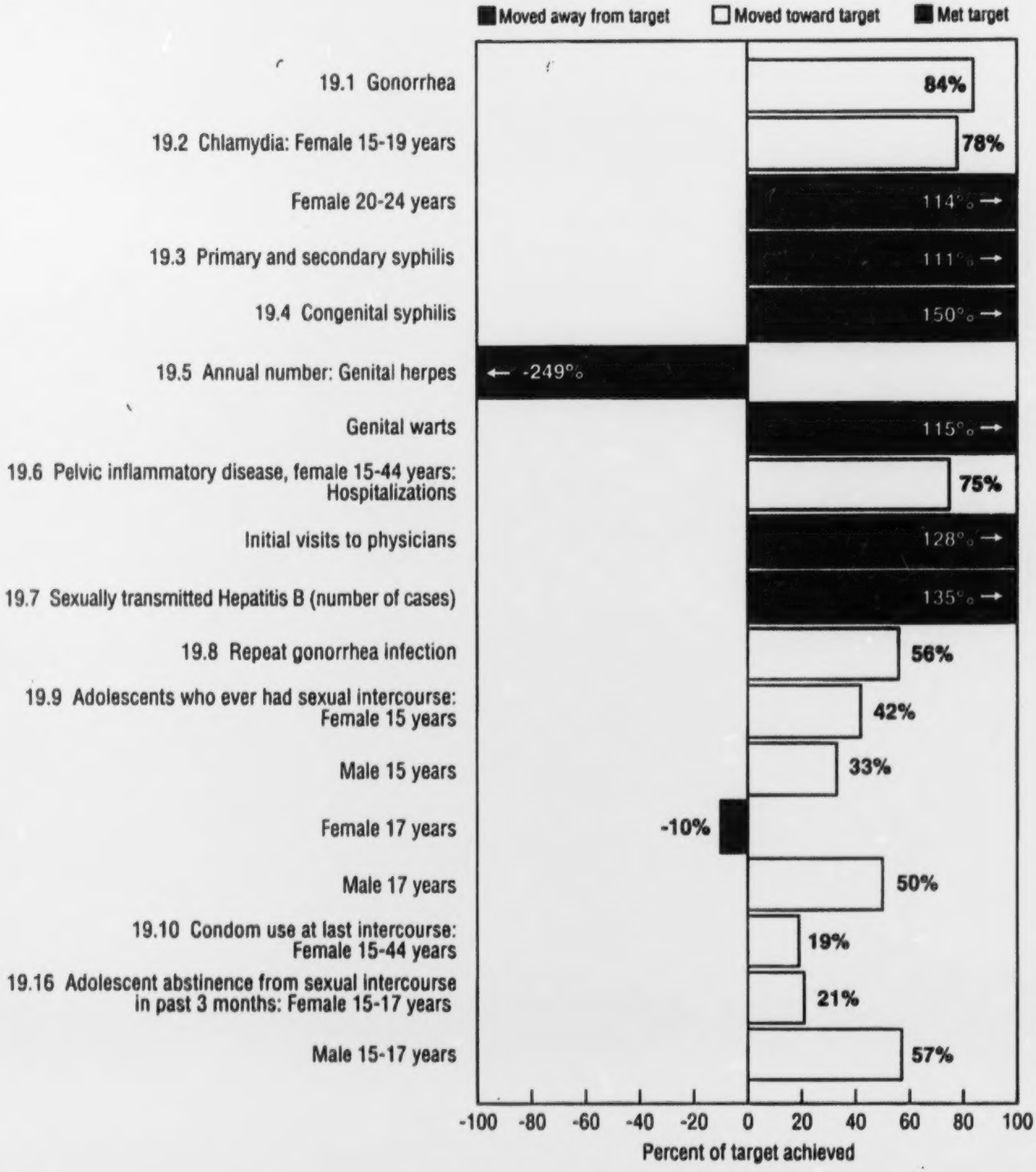
During the 1990s, notable progress was made in reducing the incidence and complications associated with common bacterial STDs. From 1985 to 1996, rates of gonorrhea **(19.1)** decreased nearly 10 percent annually. Rates stabilized between 1996 and 1997, and, between 1997 and 1999, gonorrhea rates increased by 9 percent. The 1999 gonorrhea rate of 133 per 100,000 population approached, but did not meet, the *Healthy People 2000* target of 100. Gonorrhea rates remain high among adolescents, young adults, and African Americans.

In the 1990s, chlamydia **(19.2)** emerged as the most commonly reported notifiable infectious disease in the United States (6). An estimated 3 million people contract chlamydia each year, a decline from more than 4 million cases per year in the early 1980s (4). The *Healthy People 2000* objective of less than 5 percent chlamydia positivity in women tested in family planning clinics was achieved for women 20–24 years of age (4.5 percent positivity in 1999). Positivity declined in women 15–19 years of age, from 12.2 percent in 1988 to 6.6 percent in 1999.

Untreated gonorrhea and chlamydia infection in women can lead to pelvic inflammatory disease (PID). As gonorrhea and chlamydia morbidity declined through the 1990s, so did the incidence of PID. There were steady declines in PID hospitalizations and PID visits to physicians **(19.6)**. PID hospitalizations decreased from a baseline of 311 per 100,000 females 15–44 years of age to a rate of 155 in 1998. Visits to physicians for PID decreased from 431,000 visits per year in 1988 to 251,000 in 1999. This exceeded the *Healthy People 2000* target of 290,000.

The 1990s began with the United States experiencing one of the highest rates of primary and secondary (P&S) syphilis **(19.3)** (20.3 per 100,000 population) since the 1940s. Remarkable progress occurred during the past decade. The 1999 P&S syphilis rate was the lowest since reporting began in 1941. The P&S syphilis rate declined by 88 percent since 1990 to a 1999 rate of 2.5 cases per 100,000 for the general population. The *Healthy People 2000* target of less than 4 per 100,000 was achieved. The *Healthy People 2000* target for African Americans of less than 30 per 100,000 was also achieved with a reported rate of 15 per 100,000 in 1999. Congenital syphilis **(19.4)** occurs when infants acquire syphilis from their mothers during pregnancy. The congenital syphilis rate in the United States peaked in 1991 at 107 cases per 100,000 live births and declined by 87 percent to 14 per 100,000 in 1999. The *Healthy People 2000* objectives for congenital syphilis were achieved for the general population (14.3 per 100,000 live births in 1999 versus *Healthy People 2000* target of 40), African

Figure 19. Final status on Sexually Transmitted Diseases objectives



NOTE: Complete tracking data are shown in table 19. Progress quotients are not calculated for objectives 19.11, 19.12, 19.13, 19.14, 19.15, and 19.17. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.

Americans (57.9 in 1999 versus 175), and Hispanics (20.4 in 1999 versus 50).

Fewer first-time health care consultations for genital warts (**19.5**) (240,000 consultations) were seen in 1999 compared with 1988 (290,000). The *Healthy People 2000* target of fewer than 246,500 genital warts consultations was achieved. The opposite trend occurred for genital herpes (**19.5**), with 163,000 consultations recorded in 1988 and 224,000 recorded in 1999. The number of cases of sexually transmitted hepatitis B infection (**19.7**) declined, with reported cases decreasing from 48,000 in 1987 to 25,000 in 1999, thus surpassing the year 2000 target of fewer than 30,500 cases.

Some progress was made in reducing the proportion of adolescents engaging in sexual intercourse and for increasing condom use at last intercourse (**19.10b**). All groups of in-school male and female teenagers (except 15-year-old females) reported a lower proportion of having engaged in sexual intercourse in 1999 compared with 1990. Condom use at last intercourse by partners of sexually active in-school females 15–19 years of age increased from 40 percent in 1990 to 51 percent in 1999. Sexually active in-school males 15–19 years of age increased condom use at last intercourse from 49 percent in 1990 to 66 percent in 1999.

Summary of Progress

Data to assess trends are available for 14 of 17 objectives in this priority area. Three objectives (**19.3**, **19.4**, and **19.7**) have met or exceeded the year 2000 targets, including all of the special population targets. Seven objectives (**19.1**, **19.2**, **19.6**, **19.8**, **19.10**, **19.11**, and **19.16**) moved toward their targets. One objective (**19.12**) was met at baseline; however, supplemental data for the objective indicate a trend that could be moving in the wrong direction. Progress was mixed for objectives **19.5** and **19.9**. Update data were obtained for objective **19.14** for nurse practitioners only and indicated that the objective is moving away from its target. The status for three objectives (**19.13**, **19.15**, and **19.17**) could not be assessed because data subsequent to the baseline measures are unavailable. See table 19 for the tracking data for the objectives in this priority area and figure 19 for a quantitative assessment of progress.

Discussion

The STD achievements of the 1990s demonstrate that STD prevention programs are highly effective. When programs are expanded to meet demand, new technologies can be quickly adopted, and program efforts are consistently combined with policies to expand clinical and community partnerships for prevention.

Chlamydia declined throughout much of the 1990s, mainly because of increased efforts to screen and treat women. However, from 1997 to 1999, chlamydia test positivity in family planning clinics actually increased in 8 out of 10 regions. These reported increases are most likely due to changes in newly available and better laboratory tests and expanded screening programs to populations with higher levels of disease. Efforts to create a dedicated infertility prevention program focusing on chlamydia and gonorrhea began in 1994 after the success of pilot programs involving family planning clinics and public health laboratories and wide availability of new, cost-effective diagnostic technologies. Since then, chlamydia screening has become increasingly available in publicly funded family planning and STD clinics. From 1988 to 1999, the Pacific Northwest experienced a 62 percent decline in infection among women tested for chlamydia in family planning clinics (8). The percentage of women testing positive for chlamydia—chlamydia positivity—in family planning clinics by State provides a good indication of where the disease remains most widespread. The highest level of infection tends to be in areas where screening and treatment have not been widely implemented. The greatest declines generally have been in areas with the most effective and prolonged screening programs. Future challenges will include expanded screening in women to meet regional demand, expanded screening programs for men, and expanded venues in which high-risk persons can be screened.

In 1999, 79 percent of U.S. counties reported no P&S syphilis; 25 counties were responsible for 50 percent of new cases (3). The unprecedented low rate of syphilis overall, combined with the well-documented geographic concentration of new cases, has created a unique opportunity to eliminate syphilis in the United States. In October 1999, the Public Health Service launched the *National Plan to Eliminate Syphilis from the United States* (8). The elimination effort will expand and enhance strategies that worked in the 1990s to reduce syphilis to record low levels: strengthening community involvement and partnerships, enhancing syphilis surveillance, conducting rapid outbreak investigations, expanding clinical and laboratory services, and enhancing health promotion.

Landmark studies and improved testing technology in the 1990s greatly increased knowledge of the incidence and prevalence of genital herpes and HPV. These viral STDs affect far more Americans than were documented by *Healthy People 2000* baselines in 1988 (163,000 first-time consultations for genital herpes and 290,000 first-time consultations for genital warts). An estimated 45 million Americans—more than one in five adults—are infected with genital herpes (9). Herpes prevalence increased by 30 percent from the late 1970s to the early 1990s. An estimated 1 million Americans acquire genital herpes infections annually (4). Preliminary data suggest that the number of persons infected with genital herpes has remained relatively stable during the 1990s (10). Recent data suggest that HPV is much more common than originally believed and is likely the most common STD among young, sexually active persons. Concern about HPV has increased in recent years after studies showed that some types of HPV infection cause cervical cancer. An estimated 5.5 million Americans become infected with HPV each year (4). An estimated 20 million Americans are currently infected. Research indicates that about 1 percent of sexually active adults in the United States have genital warts caused by HPV (11).

Transition to *Healthy People 2010*

Healthy People 2010 contains 19 objectives in the Sexually Transmitted Diseases focus area. Overall, *Healthy People 2010* health status objectives are similar to *Healthy People 2000* objectives. There is expanded emphasis on reducing STD complications affecting women (including infertility and heterosexually transmitted HIV infection) and reducing neonatal consequences of maternal STD infection (including chlamydia pneumonia, gonococcal and chlamydial eye infections, laryngeal papillomatosis, neonatal herpes, and preterm birth and low birthweight associated with bacterial vaginosis). Behavioral objectives include those for increased responsible adolescent sexual behavior (abstinence or condom use) and for responsible sexual behavior messages on television. Because expanded services and venues for STD prevention proved successful in the 1990s, *Healthy People 2010* objectives call for administration of hepatitis B vaccine in STD clinics, increased screening for STDs among high-risk persons in youth detention facilities and jails, and closer ties between public STD clinics and community managed-care organizations. Personal health services objectives for *Healthy People 2010* are similar to those for *Healthy People 2000*. Greater emphasis is placed on annual screening of sexually active young women for chlamydia and on STD testing of pregnant women during prenatal visits.

The link between STDs and other preventable health outcomes strengthens the relationship between the *Healthy People 2010* STD chapter and objectives in other chapters, such as: Access to Quality Health Services (e.g., counseling about health behaviors; clinical skills for providers); Cancer (e.g., cervical cancer deaths; Pap tests); Family Planning (e.g., abstinence among adolescents; dual protection against pregnancy and STDs; infertility services); HIV (e.g., condom use; STD services in HIV clinics); Immunization and Infectious Diseases (e.g., expanded hepatitis B immunization); Injury and Violence Prevention (e.g., sexual assault); and Maternal, Infant, and Child Health (e.g., fetal deaths; prenatal care; low birthweight; pre-term birth). These links are highlighted as related objectives at the end of the STD chapter in *Healthy People 2010*.

Responsible sexual behavior is the topic of 1 of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. One objective from the Sexually Transmitted Diseases focus area—adolescents who abstain from sexual intercourse or use condoms if currently sexually active—is used to measure this LHI.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

Definitions

In January 1988, the Centers for Disease Control and Prevention (CDC) issued new guidelines for classifying and reporting cases of congenital syphilis (**19.4**). The new surveillance case definition is more useful for public health surveillance; the previous definition involved physical examination, laboratory and radiographic results, and follow-up serological data (12). Followup information was often difficult to obtain and led to delayed and incomplete reporting. In addition, the clinical criteria excluded stillbirths to mothers with untreated syphilis. The new case definition includes criteria for presumptive and confirmed cases of syphilis in infants and children and includes stillbirths. A presumptive case includes all infants whose mothers have untreated or inadequately treated syphilis at delivery (13). The number of cases increased dramatically during 1989–91, partly as a result of the new case definition. The case definition was fully implemented in all States on January 1, 1992; trends after this point more accurately reflect changes in the true incidence of congenital syphilis.

For objective **19.15**, provider referral (previously called contact tracing) is the process whereby health department personnel directly notify the sexual partners of infected individuals of their exposure to an infected individual for the purpose of education, counseling, and referral to health care services.

Data Sources

Data for objective **19.6** come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics, CDC. Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms (UB–82 and UB–92). Automation of the hospital discharge systems has led to an increase in the use of these forms in recent years. A comparison of NHDS data with National Health Interview Survey (NHIS) data for people who reported being hospitalized indicated that underreporting for whites was roughly 22 percent in 1991; the difference in reporting for blacks was negligible (NHIS data were adjusted to exclude hospitalizations of 1 day or less) (14).

The baseline data on counseling to prevent HIV and other STDs for objective **19.14** are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on counseling refer to the proportion of providers who routinely delivered these services to 81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50–80 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Estimates of chlamydia prevalence among females 15–24 years of age (**19.2**) are obtained from the Sexually Transmitted Disease Surveillance System. Surveillance of chlamydial infections is incomplete in many areas of the United States; however, surveillance is improving and, in 1994, chlamydia became a nationally notifiable condition (12). Baseline and update data differ in data collection methodology, which has improved, and in the number of regions from which rates are derived, which has increased.

Baseline and 1995 data for "all females" for objective **19.9** (adolescent postponement of sexual intercourse), for "females 15–44 years of age" and for "sexually active females 15–19 years of age" for objective **19.10** (condom use at last sexual intercourse), and for "all females" for objective **19.16** (adolescent abstinence) are from the National Survey of Family Growth (NSFG). Baseline and 1995 data for "all males" for these objectives are from the National Survey of Adolescent Males (NSAM). Biennial tracking data from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or the targets. The YRBS is a school-based survey and thus does not include teenagers who are not in school and who are potentially at higher risk of these behaviors (15). YRBS data, shown by age in this report, are published by grade only in other publications. (See text for Priority Area 5 for more information.)

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Table 19. Sexually Transmitted Diseases objectives

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
19.1	**Gonorrhea** (per 100,000)	1989	300	277	247	197	173	166	149	124	123	133	133	100
	a. Black (non-Hispanic)	1989	1,990	1,941	1,714	1,408	1,175	1,163	1,046	817	802	851	849	650
	b. Adolescents 15–19 years	1989	1,123	1,114	1,031	869	728	734	671	544	522	547	534	375
	c. Female 15–44 years	1989	501	495	417	364	309	316	299	259	252	282	283	175
19.2	**Chlamydia prevalence among females 15–24 years**													
	Female 15–19 years	1988	12.2%	---	---	---	---	---	6.7%	5.4%	---	[1]6.9%	6.6%	5%
	Female 20–24 years	1988	8.5%	---	---	---	---	---	4.2%	3.4%	---	[1]4.4%	4.5%	5%
19.3	**Primary and secondary syphilis** (per 100,000)	1989	18.1	20.3	17.0	13.3	10.3	7.9	6.3	4.3	3.2	2.6	2.5	4
	a. Black	1989	118	143	122	97	75	57	45	30	22	17	15	30
19.4	**Congenital syphilis among infants aged less than 1 year** (per 100,000 live births)	1990	91.0	...	107.3	94.7	80.9	55.8	47.6	32.9	27.7	21.6	14.3	40
	a. Black	1992	[5]415.9	...	...	...	373.2	252.8	213.5	148.8	122.4	90.3	57.9	175
	b. Hispanic	1992	[5]134.6	...	...	...	101.6	73.8	61.6	38.5	33.4	28.7	20.4	50
19.5	**Annual number of first time consultations**[2]													
	Genital herpes	1988	163,000	[3]172,000	235,000	139,000	172,000	142,000	160,000	208,000	176,000	188,000	224,000	138,500
	Genital warts	1988	290,000	[3]275,000	282,000	218,000	167,000	238,000	253,000	191,000	145,000	211,000	240,000	246,500
19.6	**Pelvic inflammatory disease**													
	Hospitalizations per 100,000 females 15–44 years	1988	311	261	233	212	196	177	162	164	157	153	---	100
	Initial visits to physicians (number of visits)[2]	1988	430,800	357,522	376,540	334,793	386,860	312,000	262,000	286,000	261,000	234,000	251,000	290,000
	Hospitalizations per 100,000 females													
	a. Black 15–44 years	1988	655	567	523	539	399	376	296	320	281	266	---	150
	b. Adolescents 15–19 years	1988	342	279	239	205	159	184	141	168	186	158	---	110
19.7*	**Sexually transmitted Hepatitis B** (number of cases)	1987	47,593	47,811	58,393	52,882	35,849	35,077	29,446	36,794	34,568	32,700	[4]24,527	30,500
19.8	**Repeat gonorrhea infection**	1987	20%	---	---	16.7%	16.1%	13.8%	18.4%	18.5%	17.0%	17.5%	17.2%	15%
	a. Black	1992	21.3%	...	...	...	19.9%	15.6%	20.1%	19.8%	18.3%	18.6%	19.2%	17%
19.9*	**Adolescents who ever engaged in sexual intercourse**													
	Adolescents 15 years													
	All females	1988	27%	---	---	---	---	---	22%	---	---	---	---	15%
	In-school females	...	---	35%	36%	---	37%	---	38%	---	44%	---	43%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	---	---	15%
	In-school males	...	---	48%	44%	---	45%	---	42%	---	42%	---	34%	...
	a. All black males	1988	69%	---	---	---	---	---	58%	---	---	---	---	15%
	In-school non-Hispanic black males	...	---	---	79%	---	82%	---	77%	---	75%	---	68%	...
	Adolescents 17 years													
	All females	1988	50%	---	---	---	---	---	51%	---	---	---	---	[illegible]
	In-school females	...	---	62%	66%	---	66%	---	67%	---	62%	---	40%	...

See footnotes and key at end of table.

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Table 19. Sexually Transmitted Diseases objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	All males	1988	66%	---	---	---	---	---	53%	---	---	---	---	40%
	In-school males	...	---	73%	68%	---	68%	---	65%	---	60%	---	44%	...
	b. All black males	1988	90%	---	---	---	---	---	79%	---	---	---	---	40%
	In-school non-Hispanic black males	...	---	---	90%	---	92%	---	88%	---	85%	---	82%	...
	c. All black females 15–17 years	1988	66%	---	---	---	---	---	[5]48%	---	---	---	---	40%
	In-school non-Hispanic black females	...	---	---	84%	---	80%	---	75%	---	73%	---	73%	...
19.10	**Condom use at last sexual intercourse**													
	Sexually active unmarried females 15–44 years (by their partners)	1988	19%	---	---	---	---	---	25%	---	---	---	---	50%
	a. Sexually active females 15–19 years (by their partners)	1988	26%	---	---	---	---	---	37%	---	---	---	---	60%
	Sexually active females 15–19 years in grades 9–12 (by their partners)	...	---	40%	38%	---	46%	---	49%	---	51%	---	51%	...
	b. Sexually active males 15–19 years	1988	57%	---	---	---	---	---	---	---	---	---	---	75%
	Sexuâlly active males 15–19 years in grades 9-12	...	---	49%	54%	---	59%	---	61%	---	63%	---	66%	...
	c. Injecting drug users	1992	[6]34%	...	...	...	---	---	---	---	---	---	---	75%
	d. Black females 15–44 years (by their partners)	1988	12.4%	---	---	---	---	---	[5]25%	---	---	---	---	75%
19.11*	**Clinic services for HIV and other sexually transmitted diseases**	...	---	---	---	---	---	---	---	---	---	---	---	50%
	Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	---	---	...
	Title X funded family planning clinics													
	STD testing (excluding HIV)	...	---	---	---	---	---	95%	---	---	---	---	---	...
	STD counseling (excluding HIV)	...	---	---	---	---	---	98%	---	---	---	---	---	...
	STD treatment (excluding HIV)	...	---	---	---	---	---	93%	---	---	---	---	---	...
	Gonorrhea													
	Client testing[7]	...	---	97%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	82%	---	---	---	---	---	---	---	---	---	...
	Partner notification[8]	...	---	23%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	60%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	62%	---	---	---	---	---	---	---	---	---	...
	Syphilis													
	Client testing[7]	...	---	86%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	48%	---	---	---	---	---	---	---	---	---	...
	Partner notification[8]	...	---	29%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	57%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	40%	---	---	---	---	---	---	---	---	---	...

See footnotes and key at end of table.

Table 19. Sexually Transmitted Diseases objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	Chlamydia													
	Client testing[7]	...	---	66%	---	---	---	---	---	---	---	---	---	...
	Client treatment	...	---	73%	---	---	---	---	---	---	---	---	---	...
	Partner notification[8]	...	---	15%	---	---	---	---	---	---	---	---	---	...
	Partner testing	...	---	29%	---	---	---	---	---	---	---	---	---	...
	Partner treatment	...	---	50%	---	---	---	---	---	---	---	---	---	...
	HIV													
	Client pretest counseling	...	---	66%	---	---	---	82%	---	---	---	---	---	...
	Client testing	...	---	60%	---	---	---	74%	---	---	---	---	---	...
19.12*	**HIV and other STD education curricula**													
	Schools offering at least one STD class	1988	95%	---	---	---	---	---	---	---	---	---	---	95%
	Proportion of middle and senior high schools:													
	With HIV prevention in required courses	...	---	---	---	---	---	86%	---	---	---	---	---	...
	With STD prevention in required courses	...	---	---	---	---	---	84%	---	---	---	---	---	...
19.13	**Correct management of sexually transmitted disease cases by primary care providers**	1988	70%	---	---	---	---	---	---	---	---	---	---	90%
19.14*	**Clinician counseling to prevent HIV and other sexually transmitted diseases.**	1987	[9]10%	---	---	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients													
	a. Providers practicing in high incidence areas	...	---	---	---	---	---	---	---	---	---	---	---	90%
	b. Family physicians	1992	27%	...	...	...	---	---	---	---	---	[10,11]---	---	75%
	c. Internists	1992	30%	...	...	...	---	---	---	---	---	[10,11]---	---	75%
	d. Nurse practitioners	1992	50%	...	...	...	---	---	---	---	---	[10]45%	---	75%
	e. Obstetricians/gynecologists	1992	46%	...	...	...	---	---	---	---	---	[10,11]---	---	75%
	f. Pediatricians	1992	46%	...	...	...	---	---	---	---	---	[10,11]---	---	75%
	g. Mental health care providers	...	---	---	---	---	---	---	---	---	---	---	---	75%
19.15	**Partner notification of exposure to sexually transmitted diseases**													
	Patients with bacterial sexually transmitted diseases	1988	20%	---	---	---	---	---	---	---	---	---	---	50%
19.16*	**Adolescent abstinence from sexual intercourse for previous 3 months**													
	All sexually active females 15–17 years	1988	23.6%	---	---	---	---	---	27%	---	---	---	---	40%

See footnotes and key at end of table.

Table 19. Sexually Transmitted Diseases objectives—Con.

Final status	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
	In-school sexually active females 15–17 years	...	---	24%	25%	---	25%	---	23%	---	23%	---	25%	...
	All sexually active males 15–17 years	1988	33%	---	---	---	---	---	37%	---	---	---	---	40%
	In-school sexually active males 15–17 years	...	---	30%	36%	---	33%	---	34%	---	32%	---	32%	...
☐	19.17* **HIV and STD education for students at colleges and universities**													
	Students 18 years and over given:													
	AIDS or HIV infection prevention information	1995	49.1%	...	...	...	...	...	...	---	---	---	---	90%
	STD prevention information	1995	43.4%	...	...	...	...	...	...	---	---	---	---	90%
	Students 18 years and over taught about AIDS or HIV in a college class	1995	41.4%	...	...	...	...	...	...	---	---	---	---	90%

--- Data not available.

... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

*Baseline has been revised.

[1] Positivity measure is not adjusted for changes in laboratory test methods and associated increases in the test sensitivity.

[2] As measured by first-time visits to physicians' offices.

[3] 1989 data.

[4] Data are provisional.

[5] Data are for non-Hispanic black females.

[6] Data are for male and female injecting drug users (married and unmarried) who report having vaginal sex within the last 6 months and reported using a condom "always" or "sometimes."

[7] Includes testing at initial visit, at annual visit, or if symptomatic.

[8] By family planning clinic staff via telephone or mail.

[9] Data are for new patients.

[10] 1997–98 data.

[11] Response rate for this group was too low to produce reliable estimates.

NOTES: Data include revisions and, therefore, may differ from data previously published in these reports and other publications. HIV is human immunodeficiency virus. STD is sexually transmitted disease.

Objective number	Data source
19.1, 19a–c	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.2	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.3, 19.3a	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.4	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.5	National Disease and Therapeutic Index, IMS America, Ltd.
19.6, 19.6a–b	For hospitalizations, National Hospital Discharge Survey, CDC, NCHS. For number of visits, National Disease and Therapeutic Index, IMS America, Ltd.
19.7*	Viral Hepatitis Surveillance System, CDC, NCID.
19.8	Gonococcal Isolate Surveillance Project, CDC, NCHSTP.

Objective number	*Data source*
19.9*	Baseline and updates for all females and all black females: National Survey of Family Growth, CDC, NCHS.
	Baseline and updates for all males and all black males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10*, 19.10d	National Survey of Family Growth, CDC, NCHS.
19.10a	Baseline: National Survey of Family Growth, CDC, NCHS.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10b	Baseline: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school males and females: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10c	National AIDS Demonstration Research Program, NIH, NIDA.
19.11*	Baseline:State Family Planning Directors.
	1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA.
	1994 data: The Urban Institute. Family planning clinics: Current status and recent changes in services, clients, staffing, and income sources. March 1994.
19.12*	Baseline: AIDS education: Public school programs require more student information and teacher training, GAO, 1990.
	1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
19.13	National Disease and Therapeutic Index, IMS America, Ltd.
19.14*	1987 baseline: Sexual history-taking and counseling practices of primary care physicians, Lewis CE and Freeman HE. Western Journal of Medicine, 147: 165–7. 1987.
	1992 baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
19.15	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.16*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS.
	Baseline and update for all males: National Survey of Adolescent Males, NIH, NICHD.
	1990–99 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.17*	National College Health Risk Behavior Survey, CDC, NCCDPHP.

* Duplicate objective. See full text of objective following this table.

Sexually Transmitted Diseases Objectives

19.1: Reduce gonorrhea to an incidence of no more than 100 cases per 100,000 people.

> **19.1a**: Reduce gonorrhea among blacks to an incidence of no more than 650 cases per 100,000.
>
> **19.1b**: Reduce gonorrhea among adolescents aged 15–19 to an incidence of no more than 375 cases per 100,000.
>
> **19.1c**: Reduce gonorrhea among women aged 15–44 to an incidence of no more than 175 cases per 100,000.

19.2: Reduce the prevalence of Chlamydia trachomatis infections among young women (under the age of 25 years) to no more than 5 percent.

19.3: Reduce primary and secondary syphilis to an incidence of no more than 4 cases per 100,000 people.

> **19.3a**: Reduce primary and secondary syphilis among blacks to an incidence of no more 30 cases per 100,000.

19.4: Reduce congenital syphilis to an incidence of no more than 40 cases per 100,000 live births.

> **19.4a**: Reduce congenital syphilis among blacks to an incidence of no more than 175 cases per 100,000 live births.
>
> **19.4b**: Reduce congenital syphilis among Hispanics to an incidence of no more than 50 cases per 100,000 live births.

19.5: Reduce genital herpes and genital warts, as measured by a reduction to 138,500 and 246,500, respectively, in the annual number of first-time consultations with a physician for the conditions.

19.6: Reduce the incidence of pelvic inflammatory disease, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 100 per 100,000 women aged 15–44 and a reduction in the number of initial visits to physicians for pelvic inflammatory disease to no more than 290,000.

> **19.6a**: Reduce the incidence of pelvic inflammatory disease among blacks, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 150 per 100,000 women aged 15–44.
>
> **19.6b**: Reduce the incidence of pelvic inflammatory disease among adolescents, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 110 per 100,000 females aged 15–19.

19.7*: Reduce sexually transmitted hepatitis B infection to no more than 30,500 cases.

Duplicate objectives: 20.03b and 20.03c, combined

19.8: Reduce the rate of repeat gonorrhea infection to no more than 15 percent within the previous year.

> **19.8a**: Reduce the rate of repeat gonorrhea infection among blacks to no more than 17 percent within the previous year.

19.9*: Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 18.3

> **19.9a***: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.
>
> Duplicate objectives: 5.4a and 18.3a
>
> **19.9b***: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.
>
> Duplicate objectives: 5.4b and 18.3b
>
> **19.9c***: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.
>
> Duplicate objectives: 5.4c and 18.3c

19.10*: Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

Duplicate objective: 18.4

> **19.10a***: Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partner used a condom at last sexual intercourse.
>
> Duplicate objective: 18.4a
>
> **19.10b***: Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.
>
> Duplicate objective: 18.4b
>
> **19.10c***: Increase to at least 60 percent the proportion of intravenous drug users who used a condom at last sexual intercourse.
>
> Duplicate objective: 18.4c
>
> **19.10d***: Increase to at least 75 percent the proportion of black women aged 15–44 whose partner used a condom at last sexual intercourse.
>
> Duplicate objective: 18.4d

19.11*: Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 5.11 and 18.13

19.12*: Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that includes the way HIV and other STDs are prevented and transmitted. Duplicate objective: 18.10

19.13: Increase to at least 90 percent the proportion of primary care providers treating patients with sexually transmitted diseases who correctly manage cases, as measured by their use of appropriate types and amounts of therapy.

19.14*: Increase to at least 75 percent the proportion of primary care and mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9

19.14a*: Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9a

19.14b*: Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9b

19.14c*: Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9c

19.14d*: Increase to at least 75 percent the proportion of nurse practitioners who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9d

19.14e*: Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9e

19.14f*: Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9f

19.14g*: Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9g

19.15: Increase to at least 50 percent the proportion of all patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) who are offered provider referral services.

19.16*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objective: 5.5 and 18.15

19.17*: Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 18.11

*Duplicate objective.

Priority Area 20 Immunization and Infectious Diseases

Background

During the 20th century, the United States made great strides in the reduction in incidence of infectious disease, yet, despite the progress, infectious diseases remain an important cause of illness and death in the United States. Each of the causative agents of infectious diseases, even those that are currently rare, poses a potential threat of producing disease, as evidenced by the resurgence of tuberculosis (TB) that was complicated by multiple-drug resistance. The emergence of drug resistance to TB and other infectious diseases threatens to reverse the progress prompted by the discovery of penicillin and other miracle drugs. Even with these miracle drugs, infectious diseases are a leading cause of death worldwide, and serious infections were the third leading cause of death in the United States in 1992 (1).

The development and widespread use of vaccines, combined with increased funding and enhancement of infrastructure, have been instrumental in reducing the incidence of many infectious diseases, particularly childhood diseases. Approximately 80 percent of childhood vaccine doses are recommended for administration before the second birthday; and vaccination coverage among children in the United States is at record high levels (2). Protecting children against vaccine-preventable diseases has become a national priority. One of the greatest challenges the country faces is extending the success in immunization of children to the adult population. The public health and financial burdens due to the occurrence of vaccine-preventable diseases among adults in the United States is staggering; for example, moderately severe outbreaks of influenza may cost society more than $10 billion (3). Although the severity of influenza seasons varies, an annual average of approximately 20,000 deaths and 110,000 pneumonia and influenza (P&I) hospitalizations result from influenza infections (4–6). In addition, over 6,000 deaths occur annually from invasive pneumococcal infections, and an estimated 13,000 adults die every year from chronic liver disease related to hepatitis B virus (HBV) infection or hepatitis C virus (HCV) infection.

Data Summary

Highlights

Vaccination levels among children are the highest ever recorded in the United States (**20.11**). The proportion of children 19–35 months fully vaccinated against *Haemophilus* influenza type b (Hib) increased to 94 percent in 1999 from 2 percent in 1991 when the recommendations were published; the proportion of children vaccinated against polio increased 76 percent between 1991 (53 percent) and 1999 (90 percent). The proportion of children who have received a series of vaccinations measured by having four doses of diphtheria-tetanus-pertussis vaccine, three doses of polio vaccine, and one dose of measles-containing vaccine (MCV) increased from 55 percent in 1992 to 80 percent in 1999. From 1989 to 1998, influenza and pneumococcal vaccination levels among people 65 years of age and over (**20.11**) also continued to increase for the total population, African Americans (**20.11a**), and Hispanics (**20.11b**). However, racial and ethnic disparities in vaccination levels persist among Hispanics and non-Hispanic African Americans (7).

The incidence of almost all vaccine-preventable diseases (**20.1**) in children continued to be low during 1999. There were no cases of diphtheria or polio due to wild virus, fewer than 6 cases of tetanus among persons 25 years of age and under, and only 6 cases of reported congenital rubella syndrome. The number of rubella cases in 1999 (267) dropped 76 percent from the number of cases reported in 1990 (1,125). An interruption of indigenous measles transmission likely occurred in the fall of 1993, although importation of the virus resulted in moderate measles outbreaks in 1994 primarily among groups that refused vaccination. The number of measles cases decreased 99.6 percent from 1990 (26,527) to 1999 (100). However, pertussis incidence, which had declined by 15 percent in 1994 from the 20-year high reported in 1993, increased to an even higher level in 1996, with 7,796 cases, and remained high in 1999 (7,298).

The incidence rate of hepatitis B (HBV) (**20.3**) has continued to decline since the start of the decade, and in 1999 was far below the baseline rate reported in 1987 and far below the target rate set for the year 2000. Although cases of HBV infection in children have become rare, as a result of high levels of hepatitis B vaccine coverage in younger age groups, a substantial number (estimated 180,000) of adults continue to be infected with HBV because of low levels of vaccine coverage in older age groups. The rate of hepatitis A (**20.3**) has decreased by approximately 50 percent since 1995, and in 1999 was the lowest yet recorded, reflecting dramatic declines in the rates of disease among Native Americans (**20.3j**) and other high-risk groups. A dramatic decline of more than 80 percent in the incidence of hepatitis C (HCV) (**20.3**) has occurred since 1989 and is associated with a decrease in cases occurring among injecting-drug users.

The incidence of tuberculosis (**20.4**) declined after 1992 to 6.4 cases per 100,000 persons in 1999, well below the 1988 baseline of 9.1. Also by 1999, the percent of multi-drug resistant tuberculosis cases was reduced to 1.1 percent from a 1992 high of almost 3 percent.

In 1998, preliminary data show that the surgical wound infection rate (**20.5**) targets were surpassed for all groups except low-risk patients.

The rate of infection with bacterial meningitis (**20.7**) decreased from 6.5 cases per 100,000 persons in 1986 to 2.2 in 1999, far surpassing the year 2000 target of 4.7. Among Alaska Natives (**20.7a**), a group particularly at risk, the infection rate fell from 33 cases per 100,000 in 1987 to 5.7 in 1999, also surpassing the target of 8 cases per 100,000.

The number of restricted activity days due to ear infections per 100 children 4 years and under (**20.9**) dropped to 103.4 in 1996, a rate below the *Healthy People 2000* target of 105.0 restricted activity days per 100 children.

Summary of Progress

Data are available to assess progress for 17 of the 19 objectives in the Immunization and Infectious Diseases Priority Area. Three objectives (**20.2, 20.7,** and **20.9**) met or exceeded the year 2000 targets. For seven objectives (**20.3, 20.4, 20.11, 20.13, 20.14, 20.16,**

Figure 20. Final status of Immunization and Infectious Diseases objectives

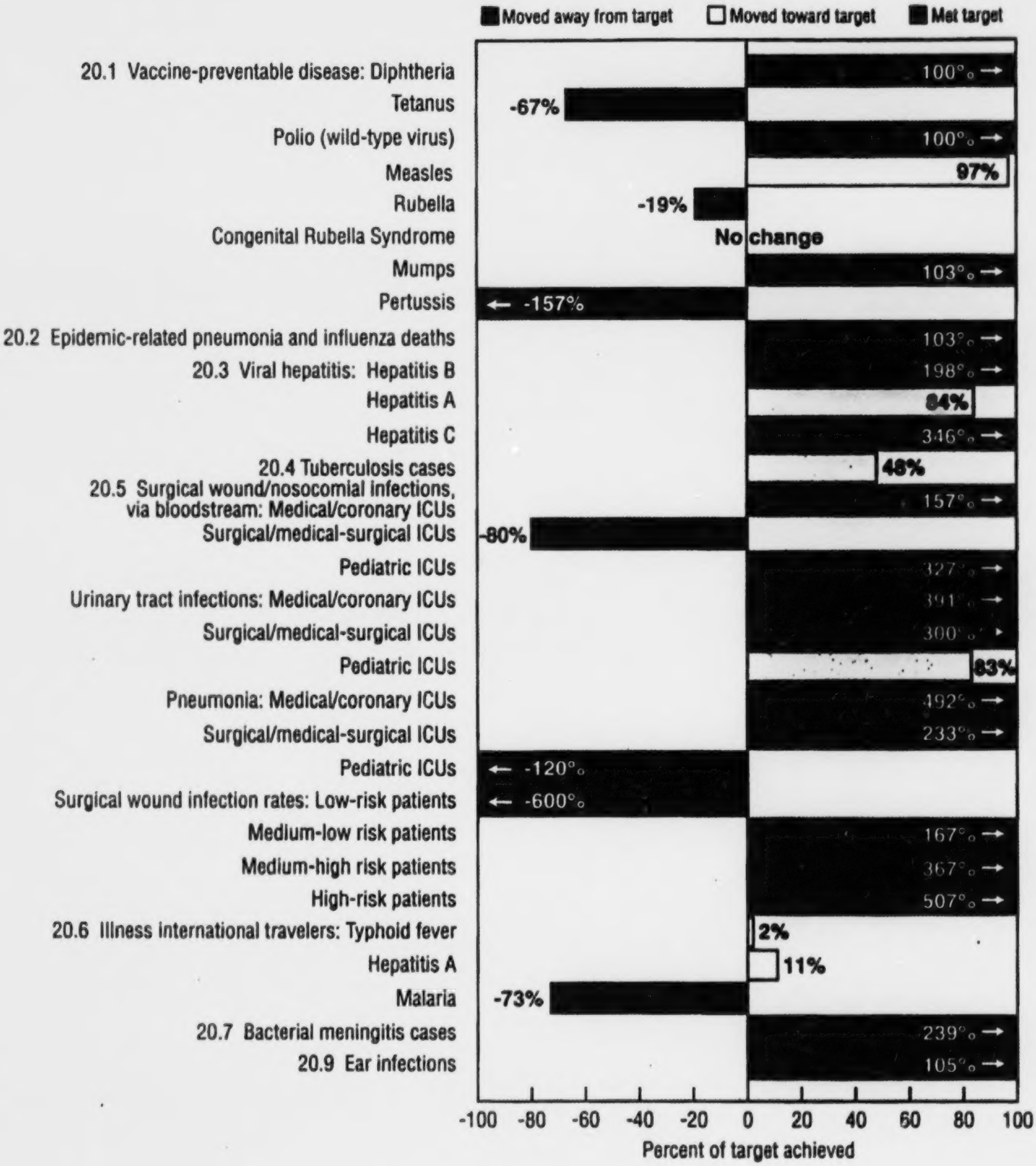
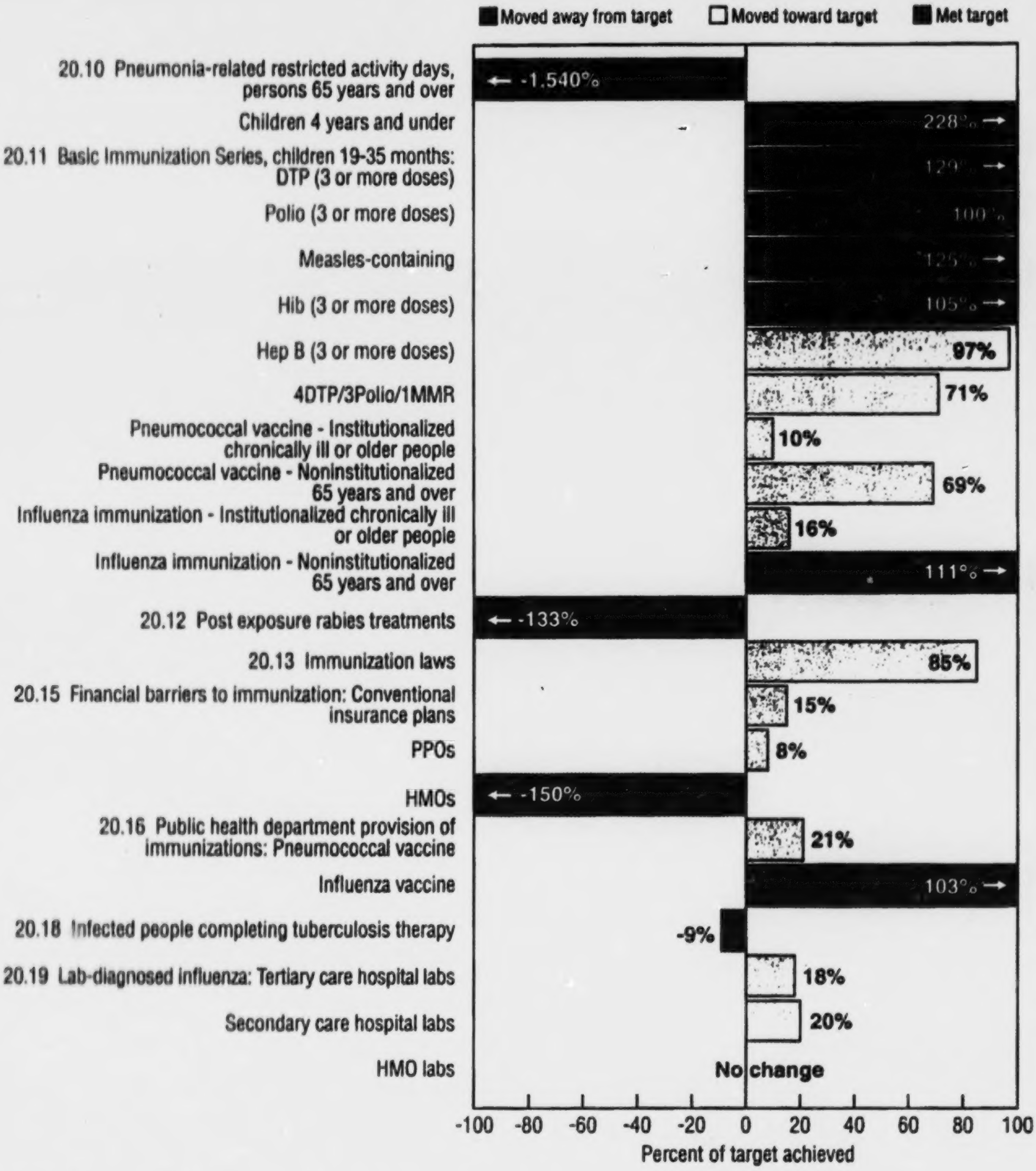


Chart continues onto next page- see notes at the end of the chart.

Figure 20. Final status of Immunization and Infectious Diseases objectives—Con.



NOTES: Complete tracking data are shown in table 20. Progress quotients are not calculated for objectives 20.8, 20.14, and 20.17.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
ICU is intensive care unit. DTP is diphtheria-tetanus-pertussis. Hib is *Haemophilus influenzae* type b vaccine. MMR is measles-mumps-rubella.
PPO is preferred provider organization. HMO is health maintenance organization.

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and **20.19**), progress was made toward achieving the targets. The progress of objective **20.14** is based on nurse practitioner data only. Trends for two objectives (**20.12** and **20.18**) indicate movement away from the year 2000 targets. Mixed results are shown for five objectives (**20.1**, **20.5**, **20.6**, **20.10**, and **20.15**). Data are not available to provide measures after baseline for two objectives (**20.8** and **20.17**). See table 20 for the tracking data for the objectives in this priority area and figure 20 for a quantitative assessment of progress.

Discussion

The reduction in incidence of infectious diseases is a significant public health achievement of the 20th century. Record levels of vaccination coverage have greatly contributed to this reduction. For instance, the dramatic decrease in cases of bacterial meningitis is due to the licensure of Hib polysaccharide-protein conjugate vaccines in 1988. Since the vaccines were licensed, the number of reported Hib invasive disease among children under 5 years of age has declined 99 percent.

High levels of hepatitis B vaccination coverage in children have resulted in decreasing rates of hepatitis B among younger age groups, reducing the burden of chronic liver disease due to childhood HBV infection and eventually resulting in decreases in the overall rate of hepatitis B. However, until there is a nationwide program to vaccinate adults at increased risk for HBV infection, transmission cannot be eliminated and disease rates will most likely remain elevated for decades.

The sharp decrease in hepatitis A rates among high-risk populations such as Native Americans is attributed to the implementation of hepatitis A vaccination programs in those populations. However, cyclic peaks in hepatitis A rates have been observed approximately every 10 years and future increases in rates may yet occur. Widespread hepatitis A vaccination of children, particularly in States and communities with consistently elevated rates of hepatitis A, is needed to achieve sustained reductions in hepatitis A rates.

Although the incidence of HCV infection has decreased dramatically over the decade, 1988–94 seroprevalence data indicate that approximately 4 million people in the United States have been infected with HCV, most of whom are chronically infected (8). Reducing the burden of HCV infection and HCV-related disease in the United States requires implementation of primary prevention activities to reduce the risk for contracting HCV infection and secondary prevention activities to reduce the risk of liver and other chronic diseases in HCV-infected persons.

High vaccination coverage levels have been achieved for children ages 19–35 months. In 1991, in an attempt to achieve 90 percent coverage by the year 2000, Congress required States to prepare Immunization Action Plans that focused on expanding the public health infrastructure for vaccination service delivery and allowed Federal grant funds to support both service delivery (for example, salaries of nurses and clinic supplies) and vaccine costs. In 1994, the Vaccines for Children (VFC) program was initiated. VFC is an entitlement program that has removed vaccine cost as a barrier to vaccination for America's neediest children, and provides a more secure source of funding. Seventy-five percent of preschool-aged children in the United States are vaccinated in one of the 50,000 provider sites participating in this program. As a result of increased vaccination coverage levels, the incidence of vaccine-preventable diseases decreased. While vaccination levels have progressed toward and reached many of the year 2000 coverage goals, continued diligence is needed to sustain and improve our progress. Timely, age-appropriate delivery of vaccines to infants and children is the backbone of the Nation's immunization program. Yet, despite recent dramatic gains in childhood vaccination coverage, more than 20 percent of 2 year olds in the United States have still not received all recommended doses of vaccine. The addition of new and improved vaccines to an already complex childhood vaccination schedule makes it increasingly challenging to ensure complete and age-appropriate vaccination.

While an increasing number of adults 65 years of age and over have taken advantage of the health benefits of vaccines against influenza and pneumococcal disease, more work needs to be done to protect older Americans from these preventable diseases, particularly to eliminate racial and ethnic disparities, and to ensure high levels of coverage among seniors who live in nursing homes.

From a rate of 9.1 cases per 100,000 persons in the 1988 baseline year, the United States tuberculosis case rate rose to 10.5 in 1992. The national resurgence of tuberculosis between 1985 and 1992 was associated with the HIV epidemic, imported cases among immigrants from tuberculosis-endemic areas, and the occurrence of multi-drug resistant strains of the disease. The resurgence necessitated a rebuilding of the network for diagnosis, treatment, and follow-up of tuberculosis cases and contacts. As a consequence, there has been a renewed decline in the United States case rate that was reduced to 6.4. per 100,000 by 1999. Although the 1999 rate is still almost twice the year 2000 target of 3.5 cases per 100,000 persons, it is an historic low annual rate for the United States since nationwide reporting began in 1953. In 1999, the rate for blacks was 16.8, for Hispanics 12.4, for American Indians/Alaska Natives 11.8, for Asians and Pacific Islanders 35.3; rates for all of these groups are now below their 1988 baselines. The targets for each of these population groups was 10.0, 5.0, 5.0, and 15.0, respectively.

The proportion of persons who completed a prescribed course of treatment for latent tuberculosis infection has changed little since the 1987 baseline of 66.3 percent and the latest report was 64.6 percent in 1998. During and after the resurgence of tuberculosis, many health departments necessarily placed priority on controlling outbreaks, finding cases, ensuring the completion of therapy by patients, examining exposed persons, and halting the spread of infection. Resources were not adequate in many areas to identify persons with latent TB infection and ensure completion of preventive therapy.

Transition to *Healthy People 2010*

Although there has been notable progress in efforts to prevent and control infectious diseases, reemerging and antimicrobial resistant infectious diseases present major public health issues. There is a continuing need to improve the capacity to address the challenges posed by infectious diseases. The scope of the *Healthy People 2010* Immunization and Infectious Diseases chapter (Focus Area 14) has been expanded from *Healthy People 2000* to reflect new prevention opportunities resulting from new scientific knowledge and technology. *Healthy People 2010* includes the addition of objectives to encourage appropriate use of antimicrobials and prophylaxis, plus new vaccines such as varicella. The chapter also places a greater emphasis on preventing disease among high-risk persons of all ages. For example, in recognition of the vaccine-preventable disease burden among adolescents and adults, several *Healthy People 2010* immunization-related objectives address these age groups.

Several of the immunization-related objectives will continue to be measured in *Healthy People 2010*. These include incidence of vaccine-preventable diseases and vaccination coverage levels for specific vaccines. Some new objectives have also been added, including one to assess how well the service delivery system is meeting the vaccination needs of young children and adolescents. Other new objectives include increasing the proportion of providers who measure coverage levels in their practice and increasing the proportion of children under 6 years of age who participate in fully operational, State- and population-based immunization registries. Two vaccine safety-related objectives have also been included in *Healthy People 2010*, reducing vaccine-associated adverse events, and increasing the number of persons under active surveillance for vaccine safety via large linked databases.

In order to better track progress in preventing and controlling viral hepatitis in the United States, the one hepatitis objective in *Healthy People 2000* (**20.3**) has been expanded into six objectives in *Healthy People 2010*. To better assess the disease burden due to HCV, *Healthy People 2010* includes a developmental objective to increase the proportion of persons with chronic HCV infection identified by health departments. Several of the infectious diseases objectives from *Healthy People 2000* were revised to reflect a growing problem of antimicrobial resistance. Recognizing that completion of therapy helps to reduce the TB case rate by preventing transmission of infection as well as outbreaks and development and spread of multi-drug resistant TB, an objective has been added, which seeks to increase the percent of all tuberculosis patients who complete therapy for tuberculosis disease within 12 months.

Immunizations is the topic of 1 of the 10 Leading Health Indicators (LHIs), which *Healthy People 2010* introduces to serve as a barometer of the Nation's health. Two objectives from the Immunizations and Infectious Diseases focus area—pneumococcal and influenza vaccinations of adults at high risk and fully vaccinated young children—are used to measure this LHI.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 20 have been published in the National Center for Health Statistics, *Healthy People Statistical Notes* series (9). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See Appendix table VI for more information.

For objective **20.2**, epidemic-related pneumonia and influenza deaths are defined as those that occur above and beyond the normal yearly fluctuations of mortality. Because of the extreme variability in epidemic-related deaths from year to year, the objective was measured using a 3-year average. The data cannot be obtained directly from published mortality figures. Each year expected numbers of pneumonia and influenza deaths are calculated through a cyclical regression model using data for previous years but excluding data for the periods when mortality was known to be raised by influenza epidemics (5). Epidemic-related deaths are defined as those that exceed the predicted number during epidemic periods based on the model.

Data Sources

The National Notifiable Disease Surveillance System (NNDSS) is the data source for tracking cases of vaccine-preventable diseases (**20.1**). Detailed epidemiologic analyses of data from NNDSS are sometimes published in special surveillance reports. Data in these reports may not agree exactly with reports published in the *Morbidity and Mortality Weekly Report* because of differences in timing or refinements in case definitions. The NNDSS is the data source for specific disease surveillance systems, such as the Tuberculosis Morbidity Data System (**20.4**). Additional hepatitis surveillance data besides that provided through NNDSS are collected through the Viral Hepatitis Surveillance Program and the Sentinel Counties Study of Acute Viral Hepatitis (**20.3**). Although cases of congenital rubella syndrome are reported through NNDSS, the actual source of the data is the National Congenital Rubella Syndrome Registry (NCRSR).

The baseline data on provision of immunizations by physicians for objective **20.14** are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. The data show the proportion of primary care providers who provided vaccination to 81–100 percent of their patients. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The providers were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Baseline data for objective **20.17** is based on data from the local health departments collected by the National Profile of Local Health Departments, NACCHO. Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.

Data Comparability

Data sources on vaccination coverage levels have changed over the years. The childhood vaccination baseline data (**20.11**) were obtained from the 1985 United States Immunization Survey (USIS) and show the range of antigen-specific vaccination levels at the time of the interview among children 24–35 months of age. From 1991 to 1994, the source of the data was the National Health Interview Survey (NHIS) and the age included in the data set was expanded to children 19–35 months of age. In 1992, the NHIS questions on childhood immunizations were modified. Therefore, the 1991 data are not directly comparable to data for subsequent years. The 1992 data are now considered the baseline data for estimates from the NHIS. The 1994 NHIS data have been provider-verified and adjusted. Providers were contacted and asked to provide vaccination information for each child in the sample.

One of the limitations of the NHIS is that it provides only national estimates. In contrast, the National Immunization Survey (NIS) provides comparable national, State, and local vaccination coverage estimates. Therefore, since 1995, vaccination coverage data have been obtained from the NIS. The NIS, first fielded in 1994, is an ongoing survey that provides the first population-based State and urban area-specific estimates of vaccination coverage by a standard methodology for the United States for children 19–35 months of age.

For influenza and pneumococcal vaccination (**20.11**), baseline data for the noninstitutionalized population were obtained from the NHIS starting in 1989; for the institutionalized population, national estimates were first available from the National Nursing Home Survey (NNHS) in 1995. NHIS estimates are based on self-report (not provider-verified), while the NNHS estimates are based on records available to nursing home staff completing the survey, and may be incomplete.

The baseline data for objective **20.11** (hepatitis immunizations among occupationally exposed workers) were collected by OSHA's Regulatory Impact Analysis; the updates are from CDC's National Center for Infectious Diseases.

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Table 20. Immunization and Infectious Diseases objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	20.1	**Vaccine-preventable diseases** (number of cases)													
		Diphtheria among people 25 years and under	1988	1	2	2	3	0	2	0	0	3	1	0	0
		Tetanus among people 25 years and under	1988	3	6	4	7	4	5	5	3	9	9	5	0
		Polio (wild-type virus)	1988	0	0	0	0	0	0	0	0	0	0	0	0
		Measles	1988	$3,396	26,527	9,411	2,237	312	963	309	508	138	100	100	0
		Rubella	1988	225	1,125	1,401	160	192	227	128	238	181	364	267	0
		Congenital Rubella Syndrome	1988	6	11	47	11	5	7	6	4	5	7	6	0
		Mumps	1988	4,866	5,292	4,264	2,572	1,692	1,537	906	751	683	666	387	500
		Pertussis	1988	3,450	4,570	2,719	4,083	6,586	4,617	5,137	7,796	6,564	7,405	7,298	1,000
☐	20.2	**Epidemic-related pneumonia and influenza deaths among people 65 years and over** (per 100,000)	1979–87	[1]19.9	[2]22.6	[3]18.6	[4]20.0	[5]15.7	[6]21.0	[7]19.2	[8]17.3	[9]15.8	---	---	15.9
☐	20.3*	**Viral hepatitis cases** (per 100,000)													
		Hepatitis B	1987	63.5	50.6	42.6	37.7	30.9	28.7	25.0	23.9	23.6	22.5	16.9	40.0
		Hepatitis A	1987	33.0	37.9	29.0	27.2	28.2	30.9	36.4	31.1	33.9	25.8	18.8	16.1
		Hepatitis C	1987	18.3	13.1	8.3	5.6	4.4	4.1	2.7	2.9	2.4	2.4	---	13.7
		Hepatitis B (number of cases)													
		a. Injecting drug users	1987	44,348	17,615	12,666	10,576	15,136	14,180	10,216	9,199	11,132	11,506	P8,630	7,932
		b. Heterosexually active people	1987	33,995	33,971	43,795	46,152	26,289	25,375	19,831	25,659	23,436	21,800	P16,351	22,663
		c. Men who have sex with men	1987	13,598	13,840	14,598	6,730	9,560	9,702	9,615	11,135	11,132	10,900	P8,176	4,568
		d. Children of Asians/Pacific Islanders	1987	10,817	8,807	7,514	6,730	5,576	5,224	4,207	4,440	4,347	4,281	3,211	1,500
		e. Occupationally exposed workers	1987	3,090	1,258	2,576	1,923	727	506	407	391	383	377	243	623
		f. Infants (chronic infections)	1987	6,012	3,003	2,235	2,464	2,464	1,682	1,682	1,682	1,046	1,046	1,046	1,111
		g. Alaska Native (number of new carriers)	1987	15	15	15	15	1	0	0	0	0	0	0	1
		Hepatitis B (cases per 100,000)													
		h. Black	1992	52.8	...	...	...	57.0	52.3	45.3	41.5	39.5	32.4	24.7	40
		Hepatitis A (cases per 100,000)													
		i. Hispanic	1992	53.8	...	...	...	50.6	61.9	44.9	62.9	72.6	41.0	37.9	$26.9
		j. American Indian/Alaska Native	1992	256.0	...	...	...	192.7	363.7	240.7	142.3	69.4	30.0	19.7	128
		Hepatitis C (cases per 100,000)													
		k. Hispanic	1992	17.2	...	...	...	11.1	6.7	3.9	7.7	[10]...	[10]...	[10]...	$13.7
☐	20.4	**Tuberculosis new cases** (per 100,000)	1988	9.1	10.3	10.4	10.5	9.8	9.4	8.7	8.0	7.4	6.8	6.4	3.5
		a. Asians/Pacific Islanders	1988	36.3	41.6	41.8	46.6	44.5	45.3	45.9	41.6	40.6	36.6	35.3	15.0
		b. Black	1988	28.3	33.0	31.9	31.7	29.1	26.8	23.9	22.3	20.5	17.8	16.8	10.0
		c. Hispanic	1988	18.3	21.4	22.8	22.4	20.6	19.5	18.0	16.0	14.4	13.6	12.4	5.0
		d. American Indian/Alaska Native	1988	18.1	18.9	16.3	16.3	14.6	17.4	16.5	14.5	13.4	12.6	11.8	5.0
☐	20.5	**Surgical wound and nosocomial infections**													

See footnotes and key at end of table.

Table 20. Immunization and Infectious Diseases objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Device-associated nosocomial infection rates in ICU patients (per 1,000 device-days)													
		Bloodstream Infections													
		Medical/coronary ICUs	1986–90	6.9	...	---	6.5	5.9	5.4	5.7	5.7	5.9	5.8	[P]5.0	6.2
		Surgical/medical-surgical ICUs	1986–90	5.3	...	---	5.8	4.9	4.6	4.3	4.9	5.4	5.7	[P]5.0	4.8
		Pediatric ICUs	1986–90	11.4	...	---	7.9	8.3	8.0	7.8	7.5	7.8	7.8	[P]6.4	10.3
		Urinary Tract Infections													
		Medical/coronary ICUs	1986–90	10.7	...	---	10.1	8.5	7.9	7.3	6.9	6.7	6.4	[P]5.7	9.6
		Surgical/medical-surgical ICUs	1986–90	7.6	...	---	6.3	5.9	5.8	4.9	5.1	4.9	5.2	[P]5.4	6.8
		Pediatric ICUs	1986–90	5.8	...	---	5.4	5.1	5.2	5.9	4.9	4.9	5.3	[P]4.1	5.2
		Pneumonia													
		Medical/coronary ICUs	1986–90	12.8	...	---	9.0	9.5	6.6	10.1	9.2	7.5	6.4	[P]6.6	11.5
		Surgical/medical-surgical ICUs	1986–90	17.6	...	---	15.1	14.1	13.6	12.9	12.7	13.7	13.4	[P]12.7	15.8
		Pediatric ICUs	1986–90	4.7	...	---	6.7	5.8	5.7	5.5	5.3	5.5	5.3	[P]3.9	4.2
		Surgical wound infection rates (per 100 operations)													
		Low-risk patients	1986–90	1.1	...	---	1.2	1.2	1.1	1.2	1.0	1.6	1.7	[P]1.4	1.0
		Medium-low risk patients	1986–90	3.2	...	---	3.2	3.2	3.1	3.4	3.2	2.7	2.7	[P]2.3	2.9
		Medium-high risk patients	1986–90	6.3	...	---	6.4	5.8	6.1	5.9	5.8	4.6	4.1	[P]3.9	5.7
		High-risk patients	1986–90	14.4	...	---	12.1	11.0	11.0	10.1	10.3	6.4	7.3	[P]5.7	13.0
☐	20.6	**Illness among international travelers** (number of cases)													
		Typhoid fever	1987	280	386	351	299	303	309	258	352	279	306	277	140
		Hepatitis A	1987	4,475	3,962	3,814	3,814	4,581	6,602	7,815	6,331	6,575	6,411	4,112	1,119
		Malaria	1987	932	1,098	1,046	910	1,275	1,014	1,167	1,392	1,544	1,225	1,065	750
■	20.7	**Bacterial meningitis cases** (per 100,000)	1986	6.5	---	---	---	---	---	1.9	2.3	2.1	1.9	2.2	4.7
		a. Alaska Native	1987	33	22	17	6.5	7.4	6.2	3.1	6.0	6.9	6.7	[11]5.7	8
☐	20.8	**Infectious diarrhea among children in child care centers**													
		Children 0–5 years	1991	32%	...	...	---	---	---	---	---	---	---	---	24%
		Children 0–3 years	1991	38%	...	...	---	---	---	---	---	---	---	---	28%
■	20.9	**Ear infections among children 4 years and under** (restricted activity days per 100 children)	1987	135.4	125.0	155.7	155.2	196.3	137.0	134.4	103.4	---	---	---	105.0
☐	20.10	**Pneumonia-related restricted activity days** (per 100 people)													
		People 65 years and over	1987	19.1	46.2	78.5	63.5	45.1	71.3	58.8	80.7	---	---	---	15.1
		Children 4 years and under	1987	29.4	51.3	[12]24.1	[12]19.4	[12]22.5	39.5	[12]23.2	[12]17.1	---	---	---	24.0
☐	20.11	**Immunization** (percent immunized)													
		Basic immunization series among children													

See footnotes and key at end of table.

Table 20. Immunization and Infectious Diseases objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Children 2 years and under	1985	[13,14]54–65%	---	---	---	---	---	---	---	---	---	---	90%
	Children 19–35 months													
	Diphtheria-tetanus-pertussis (3 or more doses)	...	---	---	69%	83%	88%	90%	95%	95%	95%	96%	96%	...
	Polio (3 or more doses)	...	---	---	53%	72%	79%	79%	88%	91%	91%	91%	90%	...
	Measles-containing	...	---	---	82%	83%	84%	90%	90%	91%	91%	92%	92%	...
	Haemophilus influenzae type b (3 or more doses)	...	---	---	2%	28%	55%	75%	92%	92%	93%	93%	94%	...
	Hepatitis B (3 or more doses)	---	---	---	---	16%	34%	68%	82%	84%	87%	88%	...	
	4DTP/3Polio/1MMR	...	---	---	---	55%	67%	68%	76%	78%	78%	81%	80%	...
	Children in licensed child care facilities[13,14]	1987–88	[15]94–95%	[16]94–96%	[17]94–96%	[18]94–96%	[19]95–98%	[20]97–98%	[21]98–99%	[22]95%	[23]93–95%	[24]93–96%	[25]93–95%	95%
	Children in kindergarten through postsecondary education institutions[13,14]	1987–88	[15]97–98%	[16]97–98%	[17]96–98%	[18]96–98%	[19]92–94%	[20]93–94%	[21]94–95%	[22]98–99%	[23]95–98%	[24]95–97%	[25]96–99%	95%
	Hepatitis B immunizations													
	Infants of antigen-positive mothers	1991	40%	...	...	71%	71%	78%	78%	79%	82%	81%	---	90%
	Occupationally exposed workers[26]	1989	37%	---	---	50%	---	67%	---	---	---	---	---	90%
	Injecting drug users in drug treatment programs	...	---	---	---	---	---	---	---	---	---	---	---	50%
	Men who have sex with men	1992–93	3%	...	...	...	...	---	---	---	---	[27]9%	---	50%
	Pneumococcal immunizations													
	Institutionalized chronically ill people or older people	1995	[28]22%	...	...	...	...	...	...	---	[29]28%	---	---	80%
	Noninstitutionalized people 65 years and over	1989	[§]15%	---	21%	---	28%	30%	34%	---	43%	46%	---	60%
	a. Black 65 years and over	1989	[§]6%	---	14%	---	14%	15%	23%	---	22%	26%	---	60%
	b. Hispanic 65 years and over	1989	[§]11%	---	12%	---	12%	14%	23%	---	23%	23%	---	60%
	Influenza immunizations (in last 12 months)													
	Institutionalized chronically ill people or older people	1995	[30]61%	...	...	...	...	...	...	---	[31]64%	---	---	80%
	Noninstitutionalized people 65 years and over	1989	[§]33%	---	42%	---	52%	55%	58%	---	63%	63%	---	60%
	a. Black 65 years and over	1989	[§]20%	---	27%	---	33%	39%	40%	---	45%	46%	---	60%
	b. Hispanic 65 years and over	1989	[§]28%	---	---	---	47%	38%	50%	---	53%	50%	---	60%
▨	20.12 **Postexposure rabies treatments** (number)	1987	18,000	---	18,800	24,700	25,000–43,000	22,000–43,000	---	16,000–39,000	20,000–40,000	---	---	9,000
☐	20.13 **Immunization laws** (number of States)[32]	1989	10–49	---	---	34–50	---	---	[33]42–50	---	[34]44–50	---	44–50	50
☐	20.14 **Provision of immunizations by clinicians**	...	---	---	---	---	---	---	---	---	---	---	---	90%

See footnotes and key at end of table.

Table 20. Immunization and Infectious Diseases objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
		Percent of clinicians routinely providing service to 81–100% of patients													
		Children:													
		DTP vaccination													
		Pediatricians	1992	86%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Nurse practitioners	1992	76%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]78%	- - -	90%
		Family physicians	1992	89%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Oral polio vaccination													
		Pediatricians	1992	87%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Nurse practitioners	1992	76%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]79%	- - -	90%
		Family physicians	1992	89%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Tetanus-diphtheria booster (under 18 years)													
		Pediatricians	1992	79%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Nurse practitioners	1992	71%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]72%	- - -	90%
		Family physicians	1992	70%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Hib vaccination													
		Pediatricians	1992	85%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Nurse practitioners	1992	68%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]74%	- - -	90%
		Family physicians	1992	74%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Tetanus-diphtheria booster (18 years and over)													
		Nurse practitioners	1992	38%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]40%	- - -	90%
		Obstetricians/gynecologists	1992	4%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Internists	1992	29%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Family physicians	1992	28%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Influenza vaccination (65 years and over)													
		Nurse practitioners	1992	42%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]47%	- - -	90%
		Obstetricians/gynecologists	1992	6%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Internists	1992	49%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Family physicians	1992	31%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Pneumococcal vaccination (65 years and over)													
		Nurse practitioners	1992	33%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35]43%	- - -	90%
		Obstetricians/gynecologists	1992	5%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Internists	1992	40%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
		Family physicians	1992	25%	...	...	...	- - -	- - -	- - -	- - -	- - -	[35,36]. . .	- - -	90%
☐	20.15	**Financial barriers to immunization**													
		Employment-based insurance plans that provide coverage for immunizations													
		Conventional insurance plans	1989	45%	47%	- - -	53%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	100%

See footnotes and key at end of table.

Table 20. Immunization and Infectious Diseases objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Preferred Provider Organization plans	1989	62%	65%	---	65%	---	---	---	---	---	---	---	100%
		Health Maintenance Organization plans	1989	98%	98%	---	95%	---	---	---	---	---	---	---	100%
☐	20.16	**Public health department provision of immunizations**													
		Pneumococcal vaccine	1990	37%	...	---	---	[33]48%	---	---	---	---	---	---	90%
		Influenza vaccine	1990	60%	...	---	---	[33]91%	---	---	---	---	---	---	90%
		Tetanus/Diphtheria vaccine	1990	70%	...	---	---	---	---	---	---	---	---	---	90%
		Tetanus	...	---	---	---	---	[33]85%	---	---	---	---	---	---	90%
		Diphtheria	...	---	---	---	---	[33]77%	---	---	---	---	---	---	90%
		Hepatitis B vaccine	1992–93	77%	...	...	...	...	---	---	---	---	---	---	90%
☐	20.17	**Local health department programs that identify tuberculosis cases**	1992–93	80%	...	...	...	...	---	---	---	---	---	---	90%
☐	20.18	**Preventive therapy for tuberculosis** (percent of infected people completing therapy)	1987	66.3%	63.0%	64.9%	66.3%	65.3%	65%	65.4%	65.2%	62.2%	64.6%	---	85%
☐	20.19	**Laboratory capability for influenza diagnosis**													
		Tertiary care hospital laboratories	1993	52%	...	...	...	...	---	57%	---	58%	---	[P]64%	85%
		Secondary care hospital laboratories	1993	45%	...	...	...	...	---	46%	---	46%	---	[P]51%	50%
		Health maintenance organization laboratories	1993	[§]68%	...	...	...	...	---	56%	---	68%	---	[P]67%	50%

- - - Data not available.

. . . Category not applicable.

[§] Baseline and/or target have been revised.

[P] Preliminary data.

Final objective status: ☐ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

[1] 1979–80 influenza season through 1986–87 influenza season.

[2] 1987–88 influenza season through 1989–90 influenza season.

[3] 1988–89 influenza season through 1990–91 influenza season.

[4] 1989–90 influenza season through 1991–92 influenza season.

[5] 1990–91 influenza season through 1992–93 influenza season.

[6] 1991–92 influenza season through 1993–94 influenza season.

[7] 1992–93 influenza season through 1994–95 influenza season.

[8] 1993–94 influenza season through 1995–96 influenza season.

[9] 1994–95 influenza season through 1996–97 influenza season.

[10] Data are unreliable. Number of cases is too small to make reliable estimates.

[11] Data are based on cases of Haemophilus influenzae type b and Streptococcus pneumoniae only.

[12] Data are unreliable. Numerator has a relative standard error of more than 30%.

[13] Range of antigen-specific immunization levels.

[14] Three or more doses for DTP and polio.

[15] 1987–88 school year.

[16] 1989–90 school year.

[17] 1990–91 school year

[18] 1991–92 school year.

[19] 1992–93 school year.

[20] 1993–94 school year.

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[21] 1994–95 school year.
[22] 1995–96 school year.
[23] 1996–97 school year.
[24] 1997–98 school year.
[25] 1998–99 school year.
[26] Health care workers only.
[27] 1994–98 data.
[28] 43% of nursing home residents surveyed in 1995 had unknown pneumococcal vaccination status and were counted as unvaccinated.
[29] 44% of nursing home residents surveyed in 1997 had unknown pneumococcal vaccination status and were counted as unvaccinated.
[30] 21% of nursing home residents surveyed in 1995 had unknown influenza vaccination status and were counted as unvaccinated.
[31] 22% of nursing home residents surveyed in 1997 had unknown influenza vaccination status and were counted as unvaccinated.
[32] Data represent the range in the number of States with laws on each of the nine antigen types (diphtheria, tetanus, pertussis, measles, mumps, rubella, polio, and Haemophilus) and by the two types of facilities (schools with grades K-12 and day care centers). Hepatitis B vaccine in schools with grades K-12 and day care centers are not included in the range. The number of States with Hepatitis B immunization laws for grades K-12 was 2 in 1994–95 and 9 in 1998–99.
[33] 1994–95 data.
[34] 1996–97 data.
[35] 1997–98 data.
[36] Response rate for this group was too low to produce reliable estimates.

NOTES: Data include revisions and, therefore, may differ from those previously published in these reports and other publications. ICU is intensive care unit. DTP is diphtheria-tetanus-pertussis. MMR is measles-mumps, rubella. Hib is Haemophilus influenzae type b.

Objective number	*Data source*
20.1	National Notifiable Disease Surveillance System, CDC, EPO.
20.2	CDC, NCID. National Vital Statistics System, CDC, NCHS.
20.3*, 20.3a–c, i–k	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Study of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
20.3d	CDC, NCID.
20.3e	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Study of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
20.3f	National Notifiable Disease Surveillance System, CDC, EPO. Margolis, HS. Estimates and reported cases of hepatitis B infection and its sequelae in Alaskan Natives. Lancet (1987) 2: 1134–6.
20.3g	Alaskan Registry, IHS.
20.3h	National Notifiable Disease Surveillance System, CDC, EPO.
20.4, 20.4a–d	Tuberculosis Morbidity Data, CDC, NCHSTP.
20.5	National Nosocomial Infection Surveillance System, CDC, NCID.
20.6	Typhoid Surveillance System, CDC, NCID. Sentinel Counties Study of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID; National Notifiable Disease Surveillance System, CDC, EPO. Malaria Surveillance System, CDC, NCID.
20.7	Bacterial Meningitis Surveillance System, CDC, NCID.
20.7a	Arctic Investigations Laboratory, CDC, NCID.
20.8	National Health Interview Survey, CDC, NCHS.
20.9	National Health Interview Survey, CDC, NCHS.
20.10	National Health Interview Survey, CDC, NCHS.

Objective number	Data source
20.11	Basic immunization series among children:
	Baseline for children 2 years and under: United States Immunization Survey, CDC, NCHSTP.
	Children 19–35 months: 1991–1994 data: National Health Interview Survey, CDC, NCHS.
	1995–96 data: National Immunization Survey, CDC, NIP.
	Immunizations among children in licensed child care facilities and in schools: State Immunization Survey, CDC, NCHSTP.
	Hepatitis B immunizations among infants of antigen-positive women:
	Perinatal Hepatitis B Prevention Program, CDC, NIP.
	Hepatitis B immunizations among occupationally exposed workers:
	Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA.
	Updates: CDC, NCID.
	Hepatitis B immunizations among men who have sex with men:
	Baseline: Young Men's Survey, San Francisco Department of Public Health. MMWR Vol. 45 No.10: March 15, 1996.
	Update: Young Men's Survey, CDC, NCHSTP.
	Pneumococcal and influenza immunizations among noninstitutionalized people:
	National Health Interview Survey, CDC, NCHS.
	Pneumococcal and influenza immunizations among institutionalized people:
	National Nursing Home Survey, CDC, NCHS.
20.11a, b	National Health Interview Survey, CDC, NCHS.
20.12	Rabies Vaccine and Immune Globulin Manufacturers Sales Data, CDC, NCID.
20.13	Survey of Immunization Laws, CDC, NIP.
20.14	Baseline: Primary Care Provider Surveys, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
20.15	Health Insurance Association of America Employer Survey, Health Insurance Association of America.
20.16	Baseline: Immunization Grant Program Profiles, CDC, NCPS.
	Update: National Profile of Local Health Departments, National Association of County and City Health Officials.
20.17	National Profile of Local Health Departments, National Association of County and City Health Officials.
20.18	Tuberculosis Program Management Report Data on Completion of Preventive Therapy, CDC, NCHSTP.
20.19	Survey of Laboratories using Rapid Viral Diagnosis of Influenza, CDC, NCID.

* Duplicate objective. See full text of objective following this table.

Immunization and Infectious Diseases Objectives

20.1: Reduce indigenous cases of vaccine-preventable diseases as follows:

Disease	2000 target
Diphtheria among people aged 25 and younger	0
Tetanus among people aged 25 and younger	0
Polio (wild-type virus)	0
Measles (indigenous)	0
Rubella	0
Congenital Rubella Syndrome	0
Mumps	500
Pertussis	1,000

20.2: Reduce epidemic-related pneumonia and influenza deaths among people aged 65 and older to no more than 15.9 per 100,000 people.

20.3*: Reduce viral hepatitis as follows:

Hepatitis B: 40 per 100,000 people
Hepatitis A: 16.1 per 100,000 people
Hepatitis C: 13.7 cases per 100,000 people

20.3a: Reduce hepatitis B among injecting drug users to no more than 7,932 cases.

20.3b*: Reduce hepatitis B among heterosexually active people to no more than 22,663 cases.

Duplicate objective: 19.7

20.3c*: Reduce hepatitis B among men who have sex with men to no more than 4,568 cases.

Duplicate objective: 19.7

20.3d: Reduce hepatitis B among children of Asian and Pacific Islanders to no more than 1,500 cases.

20.3e*: Reduce hepatitis B among occupationally exposed workers to no more than 623 cases.

Duplicate objective: 10.5

20.3f: Reduce hepatitis B among infants to no more than 1,111 chronic infections.

20.3g: Reduce hepatitis B among Alaska Natives to no more than 1 new chronic infection.

20.3h: Reduce hepatitis B among blacks to no more than 40 cases per 100,000 people.

20.3i: Reduce hepatitis A among Hispanics to no more than 26.9 cases per 100,000 people.

20.3j: Reduce hepatitis A among American Indians and Alaska Natives to no more than 128 cases per 100,000 people.

20.3k: Reduce hepatitis C among Hispanics to no more than 13.7 cases per 100,000 people.

20.4: Reduce tuberculosis to an incidence of no more than 3.5 cases per 100,000 people.

20.4a: Reduce tuberculosis among Asians and Pacific Islanders to an incidence of no more than 15 cases per 100,000 people.

20.4b: Reduce tuberculosis among blacks to an incidence of no more than 10 cases per 100,000 people.

20.4c: Reduce tuberculosis among Hispanics to an incidence of no more than 5 cases per 100,000 people.

20.4d: Reduce tuberculosis among American Indians and Alaska Natives to an incidence of no more than 5 cases per 100,000 people.

20.5: Reduce by at least 10 percent the incidence of surgical wound infections and nosocomial infections in intensive care patients.

20.6: Reduce selected illness among international travelers, as follows:

Typhoid fever: 140 cases
Hepatitis A: 1,119 cases
Malaria: 750 cases

20.7: Reduce bacterial meningitis to no more than 4.7 cases per 100,000 people.

20.7a: Reduce bacterial meningitis among Alaska Natives to no more than 8 cases per 100,000 people.

20.8: Reduce infectious diarrhea by at least 25 percent among children in licensed child care centers and children in programs that provide an Individualized Education Program (IEP) or Individualized Health Plan (IHP).

20.9: Reduce acute middle ear infections among children aged 4 and younger, as measured by days of restricted activity or school absenteeism, to no more than 105 days per 100 children.

20.10: Reduce pneumonia-related days of restricted activity as follows:

15.1 days per 100 people aged 65 and older
24 days per 100 children aged 4 and younger

20.11: Increase immunization levels as follows:

Basic immunization series among children under age 2: at least 90 percent.

Basic immunization series among children in licensed child care facilities and kindergarten through post-secondary education institutions: at least 95 percent.

Hepatitis B immunization among high-risk populations, including infants of hepatitis B surface antigen-positive mothers to at least 90 percent; occupationally exposed workers to at least 90 percent; injecting drug users in drug treatment programs to at least 50 percent; and men who have sex with men to at least 50 percent.

Pneumococcal pneumonia and influenza immunization among institutionalized chronically ill or older people: at least 80 percent.

Pneumococcal pneumonia and influenza immunization among noninstitutionalized, high-risk populations, as defined by the Immunization Practices Advisory Committee: at least 60 percent.

Duplicate objective for occupationally exposed workers: 10.9

20.11a: Increase pneumococcal pneumonia and influenza immunization among blacks aged 65 years and older to 60 percent.

20.11b: Increase pneumococcal pneumonia and influenza immunization among Hispanics aged 65 years and older to 60 percent.

20.12: Reduce postexposure rabies treatments to no more than 9,000 per year.

20.13: Expand immunization laws for schools, preschools, and day care settings to all States for all antigens.

20.14: Increase to at least 90 percent the proportion of primary care providers who provide information and counseling about immunizations and offer immunizations as appropriate for their patients.

20.15: Improve the financing and delivery of immunizations for children and adults so that virtually no American has a financial barrier to receiving recommended immunizations.

20.16: Increase to at least 90 percent the proportion of public health departments that provide adult immunization for influenza, pneumococcal disease, hepatitis B, tetanus, and diphtheria.

20.17: Increase to at least 90 percent the proportion of local health departments that have ongoing programs for actively identifying cases of tuberculosis and latent infection in populations at high risk for tuberculosis.

20.18: Increase to at least 85 percent the proportion of people found to have tuberculosis infection who completed courses of preventive therapy.

20.19: Increase to at least 85 percent the proportion of tertiary care hospital laboratories and to at least 50 percent the proportion of secondary care hospital and health maintenance organization laboratories possessing technologies for rapid viral diagnosis of influenza.

*Duplicate objective.

Priority Area 21 Clinical Preventive Services

Background

Achieving access to preventive services for all Americans was one of three overarching goals of *Healthy People 2000*. The Clinical Preventive Services priority area directly addresses this goal and covers a range of recommended screening services delivered to individuals in a health care setting. The services include immunizations, screening for the early detection of disease or risk factors, clinician counseling about modifiable risk factors such as smoking and physical activity, and use of medication to prevent disease in healthy individuals. Clinical preventive services are not only an essential component of national efforts to reduce disease and disability, but also are an important barometer of the effectiveness and functioning of the Nation's health care system. Failure to receive recommended, needed immunizations or screening tests often reflects fundamental problems in access to essential health care services or in the quality of available care. The objectives in this priority area acknowledge the importance of specific barriers in the Nation's efforts to improve the preventive care and the overall health of our population. Lack of health insurance remains a fundamental problem for a substantial number of persons, and uninsured patients are less likely to get needed services and more likely to suffer poor health. Having insurance, however, is not sufficient to ensure that individuals get the preventive care they need. Having a regular source of care may be an equally important factor for prevention. Promoting regular preventive care will require steps to ensure an adequate number of health care providers, especially for underserved rural and urban areas, along with efforts to expand health care coverage.

Health insurance, access to care, and receipt of preventive care are especially a problem in racial and ethnic minority populations (1), as well as other unserved or underserved populations. One important step toward improving care for these populations is to improve their representation among those individuals entering the health professions.

Over the last decade, there has been a growing recognition among clinicians, patients, and policymakers of the importance of preventive services as a part of primary health care. Much of this awareness can be attributed to the increasing evidence of the effectiveness of clinical preventive services in improving health outcomes and the cost-effectiveness of a range of identified services, including immunizations, screening for cancer and cardiovascular risk factors, and counseling about smoking and other important behavioral risk factors (2,3).

Data Summary

Highlights

Substantial progress has been made in the delivery of effective preventive care to Americans. The average number of years of healthy life for the total population (**21.1**) increased from a baseline of 64 years in 1990 to 65.2 years in 1998, exceeding the *Healthy People 2000* target. Among special populations targeted by the objective, the Hispanics have met the year 2000 target, while progress was made for blacks and older adults. Receipt of individual preventive services (**21.2**) increased steadily across a variety of service and patient populations, and reached the year 2000 targets for several in 1998. Of the five universally recommended childhood immunizations, four had rates that exceeded the year 2000 target of 90 percent and narrowly missed the target for the fifth immunization series, hepatitis B, with a rate of 88 percent. Receipt of mammograms and clinical breast exams in the past 2 years was reported by 64 percent of women over 50 years of age, up from 51 percent in 1992, and 63 percent of adults over 65 years of age received an influenza immunization.

By 1998, additional services made important progress toward the year 2000 targets: rates of pneumococcal immunization in older persons more than doubled to 46 percent, rates of recent tetanus booster, cholesterol screening, and Pap test increased to 57 percent, 67 percent, and 79 percent, respectively.

The proportion of the adult population with a usual source of care increased from 80 percent in 1991 to 85 percent in 1998 (**21.3**). Gains were evident in all targeted racial and ethnic groups and among persons of low income.

Little progress was made in rates of insurance coverage (**21.4**), although promising recent trends are evident for children under 18 years of age. Overall, the proportion of adults under 65 years of age without health care coverage increased slightly from 15.7 percent in 1989 to 16.6 percent in 1998. Rates for uninsured persons among Hispanics under 65 years of age (34 percent) and those below the poverty level (33 percent) were close to double that of the general population. Similar disparities exist in access to a usual source of care.

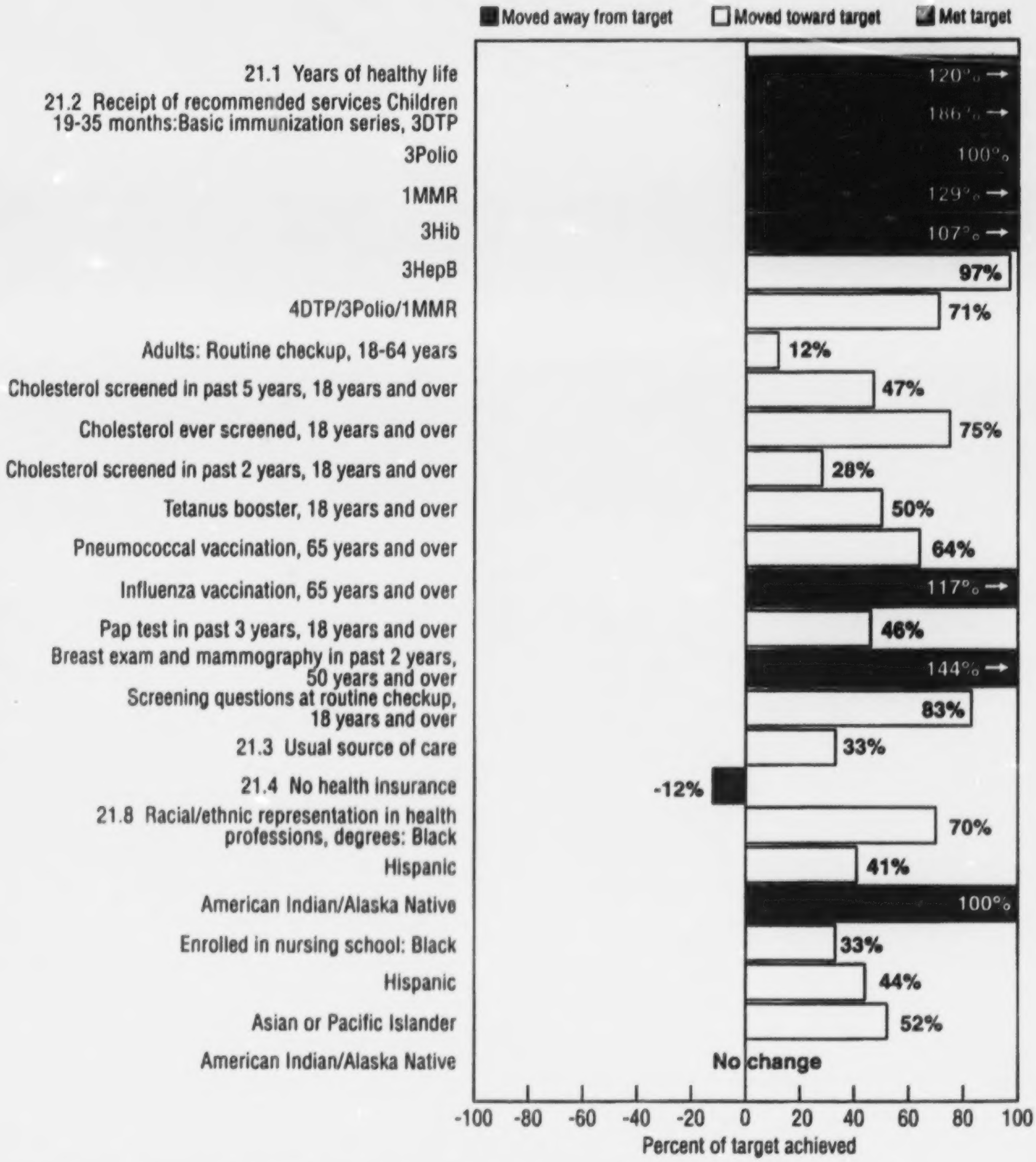
Summary of Progress

Data are available to assess the progress for six of the eight objectives for Clinical Preventive Services. One objective (**21.1**) met its year 2000 target. Two objectives (**21.3** and **21.8**) moved toward the year 2000 targets. One objective (**21.4**) moved away from its target. Progress was mixed for two objectives (**21.2** and **21.6**). For objective **21.6**, the assessment of progress is based on nurse-practitioner data only. Data beyond baseline are not available for two objectives (**21.5** and **21.7**). See table 21 for the tracking data for the objectives in this priority area and figure 21 for a quantitative assessment of progress.

Discussion

Important progress has been made in delivering effective preventive services to persons in the United States. This is reflected in generally increasing delivery rates for individual services, better coverage of preventive services by public and private insurers, and growing attention to prevention within the clinical community and the public. At the same time, substantial barriers remain. While insurance coverage of preventive services has increased significantly, a substantial and steady number of persons have no health care coverage and/or no usual source of care. One isolated pocket of recent progress, however, is insurance for children. Over the past 2 years, the Child Health Insurance Program, through Federal support to States, has reduced the

Figure 21. Final status of Clinical Preventive Services objectives



NOTES: Complete tracking data are shown in table 21. Progress quotients are not calculated for objectives 21.5, 21.6, and 21.7. See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
DTP is diphtheria-tetanus-pertussis. Hib is *Haemophilus influenzae* type b vaccine. MMR is measles-mumps-rubella.

proportion of children under 18 years of age without insurance. Insurance coverage for counseling services such as smoking cessation continues to lag far behind that for screening tests. Finally, although several measures have been shown consistently to improve preventive care—reminder systems for patients and clinicians, audit, and feedback to clinicians, and reducing financial barriers for patients (2–5)—only a minority of clinicians practice in health systems where these measures can be easily implemented through integrated data systems and computerized medical records.

An important potential force for change is the drive to make health plans accountable for delivering quality care, including appropriate preventive care. The National Committee for Quality Assurance (NCQA), through its Health Plan Employer Data and Information Set (HEDIS) (6), collects data on the provision of a number of clinical preventive services, including child and adult immunizations, smoking cessation advice, and breast and cervical cancer screening (2,3). The expectation, supported in part by preliminary data, is that increasing accountability among competing health plans will encourage them to invest in improving preventive care and in building the information infrastructure that could facilitate further gains (2,3,6). At the same time, however, these efforts are impeded by increasing turnover of patients within plans, fragmentation of care, and heightened economic pressures on the health care system.

Transition to *Healthy People 2010*

The 1990s were marked by growing attention to improving the quality of health care and reducing medical errors (7). Several issues emerged that will demand the efforts of the public health community over the next decade, for example, monitoring and reporting on health care quality (8). Other issues that surfaced, particularly with respect to increasing access to needed services, include fostering community-based, integrated systems of care that better respond to the community's needs and supporting the development of a health work force that reflects and responds to the cultural diversity of populations served.

To address these issues, *Healthy People 2010* focus area 1, Access to Quality Health Services, expands on the *Healthy People 2000* priority area on clinical preventive services. The revised focus area aims to track access to services for four important sectors of the health care system—clinical preventive care, primary care, emergency services, and long-term care and rehabilitative services.

In addition, some objectives covering clinical preventive care have been moved to other *Healthy People 2010* focus areas: focus area 14, Immunization and Infectious Diseases includes objectives on childhood immunizations, adult immunizations; focus area 12, Heart Disease and Stroke addresses cholesterol screening; and focus area 3, Cancer covers women's receipt of breast exams and mammograms and Pap tests as well as primary care provider counseling about mammograms and Pap tests.

Two objectives from the access to quality health services focus area (health insurance coverage and usual source of care) are used to measure the *Healthy People 2010* Leading Health Indicator on access to health care.

Appendix table III, a crosswalk between *Healthy People 2000* and *Healthy People 2010* objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and directions in this area.

Data Issues

Years of Healthy Life

Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track this objective in three priority areas (**8.1**, **17.1**, and **21.1**). The data used to track the objective come from the National Vital Statistics System (mortality) and the National Health Interview Survey (NHIS) (morbidity). The NHIS was redesigned in 1997 and, therefore, data for 1997–98 may not be comparable with those from previous years. See the Appendix for a discussion of the changes to the NHIS. The methodology for the *Healthy People 2000* years of healthy life measure, developed by NCHS and outside consultants is published in *Healthy People Statistical Notes* series (9).

Definitions

Operational definitions and data collection specifications for all *Healthy People 2000* objectives in Priority Area 21 have been published in the National Center for Health Statistics, *Healthy People Statistical Notes* series (10). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See Appendix table VI for more information.

Data to determine the level of receipt of clinical preventive services among adults (**21.2**) are obtained through periodic supplements to the National Health Interview Survey (NHIS). The supplements provide limited information on counseling, and recommendations for high-risk groups are not addressed. Respondents were asked if they had been asked about at least one behavior that indicates the need for counseling at their last routine checkup. A positive response was used as an indication that the person had received at least one recommended counseling service.

For objective **21.7**, a local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.

Data Sources

Baseline data for objective **21.6** (provision of recommended services) are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50 to 80 percent across these groups. The data on provision of recommended services represent the proportion of providers who report that they routinely provided 81–100 percent of eligible patients with the recommended services. The Prevention in Primary Care Study

(PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Data on the proportion of people who have a usual source of care (**21.3**) are obtained from the NHIS. In 1991 and 1992, information on source of primary care was received from one adult randomly selected from among household members. Beginning in 1993, a knowledgeable adult respondent provided information for all members of the household.

Data on the proportion of people under 65 years of age who do not have health care coverage (**21.4**) are from the NHIS. The 1989 baseline data and tracking data from 1992 through 1994 are not directly comparable because of questionnaire changes. Also, beginning with 1995 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1995 they were considered to not have health care coverage. In 1996, 0.4 percent of the population under 65 years of age were covered by public assistance other than Medicaid.

Proxy Data

The proportion of the U.S. population under 65 years of age (age-adjusted to the 1970 U.S. civilian noninstitutionalized population) that does not have health care coverage (private insurance, Medicare, Medicaid, or a military plan) is used to measure progress for objective **21.4**, financial barriers to receiving recommended clinical preventive services. This is only a partial measure. Many health insurance plans do not provide full coverage for preventive health care; however, overall coverage for preventive care services is improving. In 1997, 89 percent of employer-sponsored health insurance plans covered periodic physical examinations, 88 percent covered well-baby care, and 92 percent covered periodic gynecological examinations (11).

Beginning with 1996 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1996, they were considered to not have health care coverage. In 1996, the age-adjusted percent of the population under 65 years of age covered by Medicaid was 11.3 percent, and 0.4 percent were covered by other public assistance (12).

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Table 21. Clinical Preventive Services objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	21.1[*]	**Years of healthy life**	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.2	[‡]64.8	[‡]65.2	---	65
		a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	[‡]57.4	[‡]57.8	---	60
		b. Hispanic[1]	1990	64.8	...	63.6	[2]64.0	63.2	64.2	64.0	64.7	[‡]65.8	[‡]66.3	---	65
		c. People 65 years and over[3]	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	[‡]12.0	[‡]12.2	---	14
□	21.2	**Receipt of recommended services**													
		Children 19–35 months													
		Basic immunization series	...	---	---	---	---	---	---	---	---	---	---	---	90%
		DTP (3 or more doses)	1992	83%	...	...	...	88%	90%	95%	95%	95%	96%	96%	...
		Polio (3 or more doses)	1992	72%	...	...	...	79%	79%	88%	91%	91%	91%	90%	...
		Measles/Mumps/Rubella (1 dose)	1992	83%	...	...	...	84%	90%	90%	91%	91%	92%	92%	...
		Haemophilus influenza type b (3 or more doses)	1992	28%	...	...	...	55%	75%	92%	92%	93%	93%	94%	...
		Hepatitis B (3 or more doses)	1993	16%	...	...	...	...	34%	68%	82%	84%	87%	88%	...
		4DTP/3Polio/1MMR	1992	55%	...	...	...	67%	68%	76%	78%	78%	81%	80%	...
		People 18 years and over													
		Routine checkup, people 18–64 years[4]	1991	74%	...	...	---	78%	70%	81%	---	---	76%	---	91%
		Routine checkup, people 65 years and over	1991	67%	...	...	---	73%	62%	74%	---	---	77%	---	...
		Cholesterol checked in last 5 years	1993	60%	...	...	...	...	---	---	---	---	67%	---	75%
		Cholesterol ever checked	1991	63%	...	...	---	71%	---	---	---	---	72%	---	...
		People with low income[5]	1991	46%	...	...	---	55%	---	---	---	---	55%	---	...
		Black	1991	56%	...	...	---	72%	---	---	---	---	67%	---	...
		Hispanic	1991	51%	...	...	---	62%	---	---	---	---	56%	---	...
		American Indian/Alaska Native	1991	46%	...	...	---	60%	---	---	---	---	53%	---	...
		Cholesterol checked in last 2 years	1991	50%	...	...	---	54%	---	---	---	---	57%	---	...
		People with low income[5]	1991	37%	...	...	---	41%	---	---	---	---	43%	---	...
		Hispanic	1991	42%	...	...	---	47%	---	---	---	---	45%	---	...
		Asian/Pacific Islander	1991	45%	...	...	---	44%	---	---	---	---	54%	---	...
		American Indian/Alaska Native	1991	38%	...	...	---	49%	---	---	---	---	42%	---	...
		Tetanus booster in last 10 years	1991	52%	...	...	---	57%	56%	59%	---	---	57%	---	62%
		People 65 years and over	1991	29%	...	...	---	34%	32%	40%	---	---	41%	---	...
		Hispanic	1991	45%	...	...	---	48%	51%	51%	---	---	48%	---	...
		Asian/Pacific Islander	1991	40%	...	...	---	45%	43%	40%	---	---	45%	---	...
		People with disabilities	1991	47%	...	...	---	51%	52%	56%	---	---	---	---	...
		Pneumococcal vaccine in lifetime (people 65 years and over)	1991	21%	...	...	---	28%	30%	34%	---	[‡]42%	[‡]46%	---	60%
		People with low income[5]	1991	17%	...	...	---	18%	19%	25%	---	[‡]31%	[‡]34%	---	...
		Black	1991	14%	...	...	---	14%	15%	23%	---	[‡]22%	[‡]26%	---	...
		Hispanic	1991	12%	...	...	---	13%	14%	23%	---	[‡]23%	[‡]23%	---	...
		Asian/Pacific Islander	1991	15%	...	...	---	21%	14%	22%	---	[‡]26%	[‡]37%	---	...
		Influenza vaccine in last 12 months (people 65 years and over)	1991	42%	...	...	---	52%	55%	58%	---	[‡]63%	[‡]63%	---	60%
		People with low income[5]	1991	36%	...	...	---	41%	44%	46%	---	[‡]52%	[‡]54%	---	...
		Black	1991	27%	...	...	---	33%	39%	40%	---	[‡]45%	[‡]46%	---	

See footnotes and key at end of table.

Table 21. Clinical Preventive Services objectives—Con.

Final status		Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Target 2000
		Hispanic	1991	34%	...	...	---	47%	38%	50%	---	‡53%	‡50%	---	...
		Asian/Pacific Islander	1991	29%	...	...	---	54%	43%	51%	---	‡53%	‡68%	---	...
		Pap test in last 3 years (female 18 years and over)	1992	74%	...	...	...	78%	77%	---	---	---	79%	---	85%
		Females 65 years and over	1992	51%	...	...	...	58%	57%	---	---	---	64%	---	...
		Asian/Pacific Islander	1992	62%	...	...	...	69%	66%	---	---	---	68%	---	...
		American Indian/Alaska Native	1992	64%	...	...	...	78%	73%	---	---	---	75%	---	...
		Females with disabilities	1992	65%	...	...	...	69%	69%	---	---	---	---	---	...
		Breast exam and mammogram in past 2 years (female 50 years and over)	1992	51%	...	...	...	55%	56%	---	---	---	64%	---	60%
		Females 65 years and over	1992	43%	...	...	...	49%	49%	---	---	---	58%	---	...
		Females with low income[5]	1992	30%	...	...	...	39%	38%	---	---	---	48%	---	...
		Asian/Pacific Islander	1992	38%	...	...	...	53%	46%	---	---	---	55%	---	...
		American Indian/Alaska Native	1992	31%	...	...	...	38%	53%	---	---	---	[6]---	---	...
		Females with disabilities	1992	44%	...	...	...	51%	50%	---	---	---	---	---	...
		Asked at least one screening question at routine checkup[7]	1991	56%	...	...	---	63%	56%	---	---	---	76%	---	80%
		People 65 years and over	1991	42%	...	...	---	48%	38%	---	---	---	77%	---	...
		Asian/Pacific Islander	1991	51%	...	...	---	60%	48%	---	---	---	76%	---	...
☐	21.3	**Usual source of care**													
		Total population (18 years and over)	1991	80%	...	...	78%	83%	84%	85%	85%	‡84%	‡85%	---	95%
		a. Hispanic	1991	63%	...	...	64%	71%	71%	74%	73%	‡71%	‡72%	---	95%
		Mexican American	1991	57%	...	...	62%	69%	69%	72%	70%	‡66%	‡66%	---	95%
		b. Black	1991	78%	...	...	75%	79%	82%	82%	83%	‡81%	‡83%	---	95%
		c. Low-income people (family income below poverty level)	1991	71%	...	...	71%	72%	73%	76%	76%	‡75%	‡76%	---	95%
		d. American Indian/Alaska Native	1991	70%	...	...	85%	82%	81%	84%	83%	‡83%	‡77%	---	95%
		e. Asian/Pacific Islander	1991	70%	...	...	71%	74%	78%	81%	79%	‡80%	‡80%	---	95%
☑	21.4	**Financial barriers to receipt of clinical preventive services**													
		Proportion of people under 65 years without health care coverage[8] (age adjusted)	1989	§15.7%	---	---	17.2%	17.3%	17.8%	15.6%	16.1%	‡17.5%	‡,P16.6	---	0%
		a. American Indian/Alaska Native	1989	§36.1%	---	---	---	34.2%	39.0%	33.9%	33.9%	‡38.1%	‡,P38.7	---	0%
		b. Hispanic	1989	§31.3%	---	---	34.0%	34.2%	32.9%	30.8%	31.6%	‡34.5%	‡,P34.1	---	0%
		Mexican American	1989	§38.1%	---	---	37.8%	39.5%	37.2%	35.4%	36.7%	‡39.4%	‡,P40.1	---	0%
		Puerto Rican	1989	§21.4%	---	---	18.3%	21.0%	17.4%	17.8%	14.4%	‡19.0%	‡,P18.9	---	0%
		Cuban	1989	§20.7%	---	---	20.1%	16.9%	27.4%	21.6%	17.6%	‡21.1%	‡,P18.5	---	0%
		c. Black	1989	22.0%	---	---	22.3%	23.2%	21.5%	17.9%	19.0%	‡20.1%	‡,P20.4	---	0%

See footnotes and key at end of table.

Table 21. Clinical Preventive Services objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	21.5	**Clinical preventive services from publicly funded programs** (proportion of eligible people)													
		Federal programs													
		Screening	1991–92	10–100%	...	...	...	---	---	---	---	---	---	---	90%
		Counseling	1991–92	40–100%	...	...	...	---	---	---	---	---	---	---	90%
		Immunizations	1991–92	10–100%	...	...	...	---	---	---	---	---	---	---	90%
☐	21.6	**Provision of recommended services by primary care providers**	...	---	---	---	---	---	---	---	---	---	---	---	50%
		Percent of clinicians routinely providing service to 81–100% of patients													
		Preventive services for children:													
		Hemoglobin/hematocrit													
		Pediatricians	1992	78%	...	...	...	---	---	---	---	---	---	---	...
		Nurse practitioners	1992	77%	...	...	...	---	---	---	---	---	---	---	...
		Family physicians	1992	52%	...	...	...	---	---	---	---	---	---	---	...
		Eye exam (for strabismus and amblyopia)													
		Pediatricians	1992	64%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	67%	...	...	...	---	---	---	---	---	[9]51%	---	...
		Family physicians	1992	53%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Blood pressure													
		Pediatricians	1992	78%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	71%	...	...	...	---	---	---	---	---	[9]65%	---	...
		Family physicians	1992	42%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Height and weight													
		Pediatricians	1992	96%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	88%	...	...	...	---	---	---	---	---	[9]85%	---	...
		Family physicians	1992	89%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		DTP vaccination													
		Pediatricians	1992	86%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	76%	...	...	...	---	---	---	---	---	[9]78%	---	...
		Family physicians	1992	89%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Oral polio vaccination													
		Pediatricians	1992	87%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	76%	...	...	...	---	---	---	---	---	[9]79%	---	...
		Family physicians	1992	89%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Tetanus-diphtheria booster													
		Pediatricians	1992	79%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	71%	...	...	...	---	---	---	---	---	[9]72%	---	...
		Family physicians	1992	70%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Hib vaccination													
		Pediatricians	1992	85%	...	...	...	---	---	---	---	---	[6,9]---	---	...
		Nurse practitioners	1992	68%	...	...	...	---	---	---	---	---	[9]74%	---	...
		Family physicians	1992	74%	...	...	...	---	---	---	---	---	[6,9]---	---	...

Table 21. Clinical Preventive Services objectives—Con.

Final status	*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
	Preventive services for adults:													
	Tetanus-diphtheria booster (18 years and over)													
	Nurse practitioners	1992	38%	...	...	...	---	---	---	---	---	[9]40%	---	...
	Obstetricians/gynecologists	1992	4%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	29%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	28%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Influenza vaccination (65 years and over)													
	Nurse practitioners	1992	42%	...	...	...	---	---	---	---	---	[9]47%	---	...
	Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	49%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	31%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Pneumococcal vaccination (65 years and over)													
	Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	[9]43%	---	...
	Obstetricians/gynecologists	1992	5%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	40%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	25%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Blood pressure													
	Nurse practitioners	1992	82%	...	...	...	---	---	---	---	---	[9]90%	---	...
	Obstetricians/gynecologists	1992	88%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	92%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	89%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Cholesterol level													
	Nurse practitioners	1992	45%	...	...	...	---	---	---	---	---	[9]55%	---	...
	Obstetricians/gynecologists	1992	36%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	80%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	61%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Breast exam (by clinician)													
	Nurse practitioners	1992	78%	...	...	...	---	---	---	---	---	[9]67%	---	...
	Obstetricians/gynecologists	1992	92%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	76%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	62%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Pap smear													
	Nurse practitioners	1992	77%	...	...	...	---	---	---	---	---	[9]65%	---	...
	Obstetricians/gynecologists	1992	92%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	67%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	62%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Mammogram													
	Nurse practitioners	1992	63%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Patients 40–49 years	...	---	---	---	---	---	---	---	---	---	[9]58%	---	...
	Patients 50 years and over	...	---	---	---	---	---	---	---	---	---	[9]60%	---	...
	Obstetricians/gynecologists	1992	85%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Internists	1992	67%	...	...	...	---	---	---	---	---	[6,9]...	---	...
	Family physicians	1992	53%	...	...	...	---	---	---	---	---	[6,9]...	---	...

See footnotes and key at end of table.

Table 21. Clinical Preventive Services objectives—Con.

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
☐	21.7	**Local health department assurance of access to essential clinical preventive services**													
		Proportion of people served	...	---	---	---	---	---	---	---	---	---	---	---	90%
		Proportion of local health departments that:													
		Assess the extent to which screening, immunization, and counseling services are provided to the local population	1992–93	76%	...	...	...	...	---	---	---	---	---	---	...
		Collect data to document the number of providers of clinical preventive services in their jurisdiction	1992–93	45%	...	...	...	...	---	---	---	---	---	---	...
		Evaluate to determine whether a gap exists between available clinical preventive services and the need for those services	1992–93	57%	...	...	...	...	---	---	---	---	---	---	...
		(Of those that assess gaps) Provide clinical preventive services to fill gaps	1992–93	83%	...	...	...	...	---	---	---	---	---	---	...
☐	21.8	**Racial/ethnic minority representation in the health professions**													
		Degrees awarded:													
		Black	1985–86	5.0%	---	[10]5.7%	[11]5.7%	[12]5.9%	[13]5.9%	[14]6.0	[15]6.6	[16]6.7	[17]7.1	---	8.0%
		Hispanic	1985–86	3.0%	---	[10]4.3%	[11]4.8%	[12]4.8%	[13]4.3%	[14]4.1	[15]3.8	[16]4.0	[17]4.4	---	6.4%
		American Indian/Alaska Native	1985–86	0.3%	---	[10]0.4%	[11]0.5%	[12]0.4%	[13]0.4%	[14]0.4	[15]0.5	[16]0.6	[17]0.6	---	0.6%
		a. Enrolled in schools of nursing:													
		Black	[11]1991–92	9.1%	...	...	...	[12]8.6%	[13]8.7%	[14]9.0%	[15]9.4	---	---	---	10.0%
		Hispanic	[11]1991–92	3.1%	...	...	...	[12]3.0%	[13]3.0%	[14]3.2%	[15]3.5	---	---	---	4.0%
		Asian/Pacific Islander	[11]1991–92	2.9%	...	...	...	[12]3.2%	[13]3.3%	[14]3.6%	[15]4.0	---	---	---	5.0%
		American Indian/Alaska Native	[11]1991–92	0.7%	...	...	...	[12]0.6%	[13]0.7%	[14]0.7%	[15]0.7	---	---	---	1.0%

--- Data not available.

... Category not applicable.

Final objective status: ▨ Met ☐ Toward ☐ Mixed/ no change ☐ Away ☐ Cannot assess

[b] Baseline has been revised.

[p] Preliminary data.

[‡] The NHIS was redesigned in 1997. Data may not be comparable with previous years; see Appendix.

[1] Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See Appendix.

[2] Estimate derived from 1991–93 health status data and 1992 mortality data.

[3] Years of healthy life remaining for those surviving to age 65.

[4] In the last 3 years for people 18–64 and in the last year for people 65 years and over.

[5] Data are for persons with family incomes below the Census poverty threshold.

[6] Response rates for this group were too low to produce reliable estimates.

[7] For people 18–64 years, a screening question was asked during a routine checkup in the past 3 years on at least one of the following: diet, physical activity, tobacco use, alcohol use, drug use, sexually transmitted diseases, or contraceptive use. For people 65 years and over, a screening question was asked during a routine checkup in the past year about at least one of the following: diet, physical activity, tobacco use, or alcohol use.

[8] Beginning with 1996 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1996 they were considered not to have health care coverage.

[9] 1997–98 data.

[10] Academic year 1990–91.
[11] Academic year 1991–92.
[12] Academic year 1992–93.
[13] Academic year 1993–94.
[14] Academic year 1994–95.
[15] Academic year 1995–96.
[16] Academic year 1996–97.
[17] Academic year 1997–98.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications. DTP is diphtheria-tetanus-pertusis. MMR is measles-mumps-rubella. Hib is Haemophilus influenzae type B.

Objective number	*Data source*
21.1*, 21.1a–c	National Vital Statistics System, CDC, NCHS; National Health Interview Survey, CDC, NCHS.
21.2	Excluding basic immunization series among children: National Health Interview Survey, CDC, NCHS.
	Basic immunization series among children:
	Baseline for children 2 years and under: United States Immunization Survey, CDC, NCHSTP.
	Children 19–35 months: 1991–1994 data: National Health Interview Survey, CDC, NCHS.
	1995–1999 data: National Immunization Survey, CDC, NIP.
21.3, 21.3a–e	National Health Interview Survey, CDC, NCHS.
21.4, 21.4a–c	National Health Interview Survey, CDC, NCHS.
21.5	For Community/Migrant Health Centers: Bureau of Primary Health Care Survey, HRSA, OPEL
	For other publicly funded programs: Survey of Federal Programs, HRSA, OPEL.
21.6	Baseline: Primary Care Providers Survey, OPHS, ODPHP.
	Update: Prevention in Primary Care Study, American College of Preventive Medicine.
21.7	National Profile of Local Health Departments, National Association of County and City Health Officials.
21.8	Minorities and Women in the Health Fields, HRSA, BHPr.
21.8a	National League for Nursing, Nursing Data Source.

*Duplicate objective. See full text of objective following this table.

Clinical Preventive Services Objectives

21.1*: Increase years of healthy life to at least 65 years.

Duplicate objectives: 8.1 and 17.1

> **21.1a***: Increase years of healthy life among blacks to at least 60 years.
>
> Duplicate objectives: 8.1 and 17.1a
>
> **21.1b***: Increase years of healthy life among Hispanics to at least 65 years.
>
> Duplicate objectives: 8.1b and 17.1b
>
> **21.1c***: Increase years of healthy life among people aged 65 and older to at least 14 years remaining.
>
> Duplicate objectives: 8.1c and 17.1c

21.2: Increase the proportion of people who have received selected clinical preventive screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

Receipt of selected clinical preventive and counseling services	2000 target (percent)
Basic Immunization Series	90
Routine check-up	91
Cholesterol checked in last 5 years	75
Cholesterol ever checked	75
Cholesterol checked in last 2 years	75
Tetanus booster in last 10 years	62
Pneumococcal vaccine in lifetime (aged 65 and over)	60
Influenza vaccine in last year (aged 65 and over)	60
Pap test in last 3 years	85
Breast exam and mammogram in past 2 years	60
Counseling services	80

21.3: Increase to at least 95 percent the proportion of people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

> **21.3a**: Increase to at least 95 percent the proportion of Hispanics and the proportion of Mexican-Americans who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.
>
> **21.3b**: Increase to at least 95 percent the proportion of blacks who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.
>
> **21.3c**: Increase to at least 95 percent the proportion of low-income people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.
>
> **21.3d**: Increase to at least 95 percent the proportion of American Indians and Alaska Natives who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.
>
> **21.3e**: Increase to at least 95 percent the proportion of Asians and Pacific Islanders who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

21.4: Improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

> **21.4a**: Decrease to 0 percent the proportion of American Indians and Alaska Natives under 65 years without health care coverage.
>
> **21.4b**: Decrease to 0 percent the proportion of Hispanics under 65 years, and Mexican-Americans, Puerto Ricans, and Cubans under 65 years without health care coverage.
>
> **21.4c**: Decrease to 0 percent the proportion of blacks under 65 years without health care coverage.

21.5: Ensure that at least 90 percent of people for whom primary care services are provided directly by publicly funded programs are offered, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

21.6: Increase to at least 50 percent the proportion of primary care providers who provide their patients with the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

21.7: Increase to at least 90 percent the proportion of people who are served by a local health department that assesses and assures access to essential clinical preventive services.

21.8: Increase the proportion of all degrees in the health professions and allied and associated health profession fields awarded to members of underrepresented racial and ethnic minority groups as follows:

Degrees awarded to—	2000 target (percent)
Blacks	8.0
Hispanics	6.4
American Indians and Alaska Natives	0.6

> **21.8a**: Increase the proportion of individuals from underrepresented racial and ethnic minority groups enrolled in U.S. schools of nursing.
>
> | Proportion enrolled in fall academic year | 2000 target (percent) |
> |---|---|
> | Blacks | 10 |
> | Hispanics | 4 |
> | Asians and Pacific Islanders | 5 |
> | American Indians and Alaska Natives | 1 |

*Duplicate objective.

Priority Area 22 Surveillance and Data Systems

Background

Public health surveillance is the systematic collection, analysis, and use of health information. It is essential to understanding the health status of a population and to planning effective programs and interventions. The Institute of Medicine identifies surveillance as one of the core functions of public health (1). Surveillance and health data systems provide information on illness, disability, and death from acute to chronic conditions; injuries, personal, environmental, and occupational risk factors; preventive and treatment services; and costs. To be most useful, public health data must be accessible, accurate, timely, and clearly stated and must adhere to strict confidentiality standards. Surveillance or health data systems must be linked with other data systems as well as linked and integrated at Federal, Tribal, State, and local levels.

While the collection of national public health data usually rests with Federal agencies, data collection, analysis, and use depend on the active involvement of many partners including Tribal, State, and local agencies. For example, the Vital Statistics Cooperative program (VSCP) collects information on births, deaths, marriages, and divorces from many sources in local communities, including hospitals, funeral directors, medical examiners, coroners, hospitals, religious authorities, and justices of the peace. VSCP gets information from all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. Other data collection systems, based on sample surveys rather than reports, depend on the participation of thousands of private citizens nationwide. Still others rely on the administrative records of public and private health care organizations.

Having appropriate surveillance and data systems in place also provides the ability to measure the health status of special populations. Morbidity, mortality, health behaviors, and access to and use of health services vary markedly by age, race, sex, and socioeconomic status. There are 319 *Healthy People 2000* subobjectives that are targeted toward racial and ethnic minorities, elderly people, people with chronic disabilities, people with less than a high school education, people with low incomes, and others.

At the beginning of the 1990s, 23 percent of the *Healthy People 2000* objectives could not be assessed because of the unavailability of national data. The lack of data at the State and local levels was of even greater concern. During the decade, almost all the States adopted their own State plans or objectives. Data have been needed to monitor progress toward achieving those objectives and to compare that progress with the national progress. Thus, several objectives in Priority Area 22 were directed toward enhancing data systems in States and communities. Similarly, some objectives addressed the identification of and response to data gaps related to minorities and other special populations.

Data Summary

Two (**22.1** and **22.6**) of the seven objectives in the Surveillance and Data Systems priority area have been met. Four (**22.2–22.5**) objectives moved toward the target, and one objective (**22.7**) showed mixed progress.

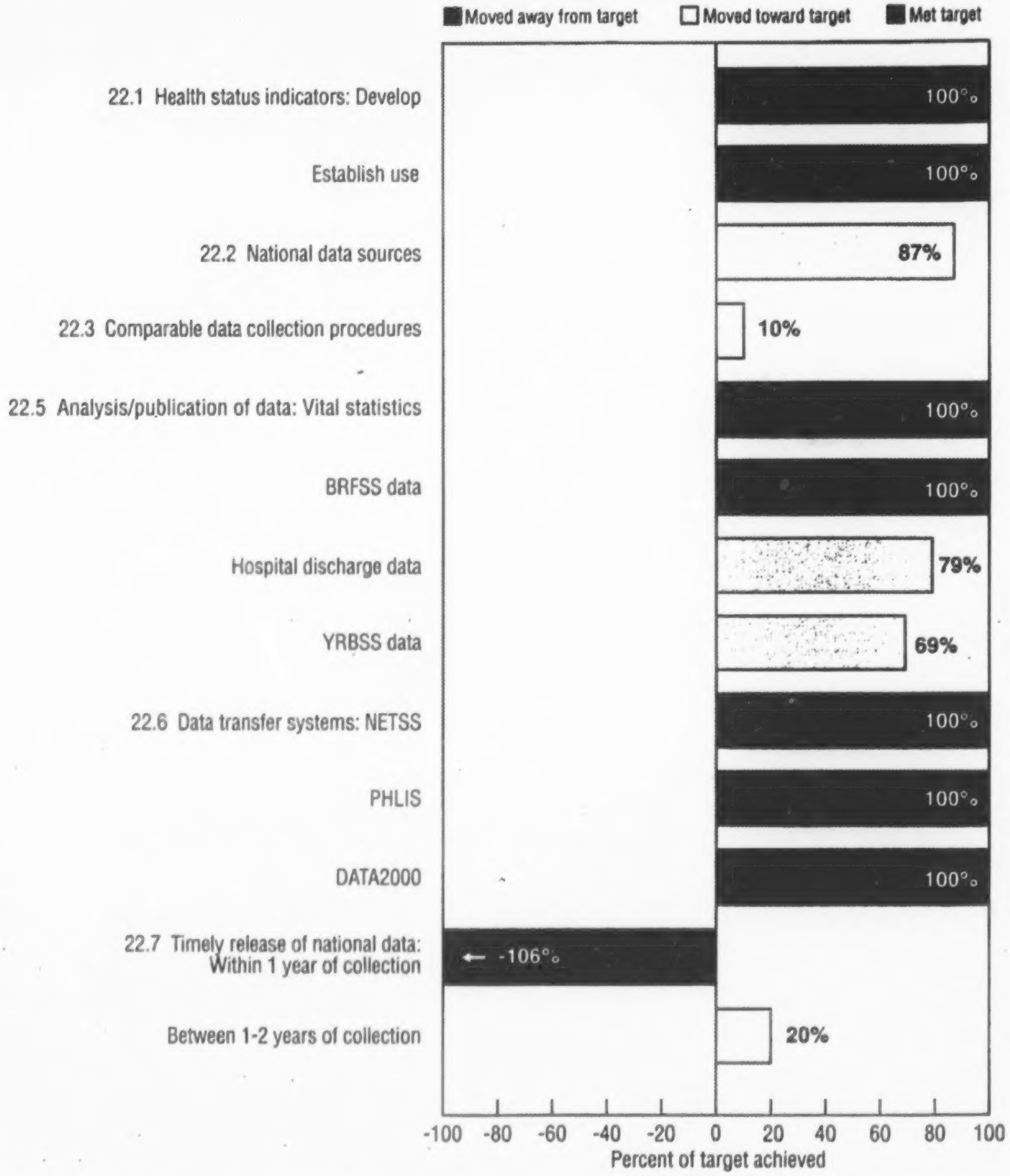
Objective **22.1**, to develop and establish use of Health Status Indicators (HSI's), has been achieved. The first part of the objective was achieved early in the decade when the consensus set of 18 indicators was published in July 1991 (2). National data for the HSI's were first published in October 1992 (3). National trends in the HSI data for the past 3 years are shown in the Health Status Indicators/Priority Data Needs section in table B. Table C presents the indicators for the major racial and ethnic groups for 1998, the most recent data year. A detailed discussion of HSI differentials by race and Hispanic origin was published in September 1995 (4). An assessment of the progress achieved by each State and the United States was published in November 2000 (5). National data for Priority Data Needs (6), a set of indicators of community health status identified as important for evaluating the health of a population but lacking data at all levels of government, are presented in table D.

The achievement of the second part of this objective, to establish use of the HSI's in at least 40 States, was measured by tracking their use by State and local health departments. All States, including the District of Columbia, are monitoring some of the HSI's. At least nine States have published the HSI data for county, region, or health department district (an update of Statistics and Surveillance number 8) (7). The 1997 State and Local Capacity Survey developed and administered by the Public Health Foundation found that 41 of 42 responding States provided information about some HSI's to local health departments (8). Thirty-nine of forty-six responding States have produced a report that includes over one-half the HSI's and 31 of these States indicated that the reports included information specific to areas within the State (such as counties, regions, and health districts). HSI data by State can be accessed via FTP (file transfer protocol) on the Internet at http://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Healthy_People_2000. See the section on Health Status Indicators/Priority Data Needs for more information.

Objective **22.2** was almost achieved with 97 percent of all *Healthy People 2000* objectives having ongoing data sources. Overall, nine objectives lacked baseline data (**7.12**, **7.14**, **7.17**, **9.11**, **9.20**, **14.14**, **14.16**, **17.20**, and **18.17**). By 1997, 32 of the 44 States and the District of Columbia with *Healthy People 2000* plans had included surveillance and data systems objectives in their plans.

Objective **22.3** has three parts: developing, disseminating, and incorporating into Public Health Service data collection systems the procedures for collecting comparable data for each of the *Healthy People 2000* national health objectives among Federal, State, and local agencies. The baseline shows the percent of objectives that are tracked with vital statistics data, which are comparable at all levels of measurement. Comparable procedures for monitoring population-based nutrition objectives among Federal surveys were included for 1992. Objectives measured by systems that have comparable data at the Federal, State, or local levels such as those monitored with the Youth Risk Behavior Surveillance System (YRBSS), the National Notifiable Disease Surveillance System, the Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System), and several other national systems that

Figure 22. Final status of Surveillance and Data Systems objectives



NOTES: Complete tracking data are shown in table 22. Progress quotients are not calculated for objective 22.4.
See the section on Measuring Progress Toward the *Healthy People 2000* Targets in the Appendix for more information.
BRFSS is Behavioral Risk Factor Surveillance System. YRBSS is Youth Risk Behavior Surveillance System. NETSS is National Electronic Telecommunications System for Surveillance. PHLIS is Public Health Laboratory Information System.

depend on State data were included for 1994. Objectives monitored with the National Health Interview Survey were also included in 1994 if the State Behavioral Risk Factor Surveillance System (BRFSS) asked questions that were similar in wording and conceptual approach (some objectives, for example, physical activity and current smoking, are being monitored by the BRFSS but not with methods comparable with national methods).

The denominator for the proportion of objectives with comparable data is the total number of objectives, which underrepresents Federal-State-local objective measurement comparability. Some objectives are out of scope for the purposes of tracking objective **22.3**, including most Services and Protection objectives, which do not involve traditional data collection comparability issues, although they may involve what is considered appropriate protocol. These objectives include patient education and counseling, employer- and community-based prevention programs, development and implementation of quality standards, conformance with national guidelines, and enactment of national or State laws. Therefore, the 1994 estimate of 21 percent is an underestimate of the actual proportion of all objectives with comparable data collection procedures.

Developing and disseminating comparable data collection procedures involves systematically documenting the methods that are currently being used and accepted (as well as changes in measurement methods over time). A series of reports was initiated as part of the *Healthy People Statistical Notes* series that documented methods for objectives in specific priority areas of *Healthy People 2000*. For a priority area, the report describes how each objective is being measured at the Federal level and the relevant data issues involved. Six of these *Statistical Notes* were published (see Appendix table VI). For *Healthy People 2010*, a separate report, *Tracking Healthy People 2010*, was published in November 2000 (9). This report contains operational definitions for the *Healthy People 2010* objectives that have baseline data (595 of 824 measures—72 percent—have complete baseline data and operational definitions). The report also provides information on the major national data sources and State data sources (if available) used for *Healthy People 2010* objectives and discusses cross-cutting statistical issues.

Objective **22.4** (duplicated as objective **17.22** during the midcourse review) addresses the development and implementation of a national process to identify significant gaps in the Nation's disease prevention and health promotion data. Progress was made, although it is difficult to quantify. There are two parts to this objective: the identification of data gaps in broad areas of public health where insufficient data exist to develop objectives, and the identification of data gaps connected with special populations. In 1993, first steps to identify significant gaps in broad areas of the Nation's disease prevention and health promotion data were taken. The National Committee on Vital and Health Statistics Subcommittee on State and Community Health Statistics recommended the development of a coordinated Federal, State, and community health statistics system that should include the following data sets in order to carry out the functions of assessment and policy development: vital statistics, in-patient hospitalization utilization, ambulatory care, long-term care, incidence and prevalence of disease and disability, health care resources, health care costs and expenditures, demographic profiles of populations served, access to basic health care and preventive services, health risk behaviors and attitudes, and environmental health risks.

The process of the *Healthy People 2000* midcourse review (10) brought the Nation closer to achieving the latter part of objective **22.4**. During the midcourse review, considerable attention was given to population groups that are at highest risk for premature death, disease, or disability, and 120 new subobjectives were proposed by the lead PHS agencies; 111 new subobjectives were eventually added (see the section on the midcourse review in the Appendix).

The importance of identifying data gaps connected with special populations is further emphasized in *Healthy People 2010* where objectives that utilize population-based measures display the baseline status of multiple population groups. The minimum breakout set of groups includes race and ethnicity, gender, and measures of socioeconomic status. However, many objectives include additional population groups such as age, geographic location, health insurance status, disability status, sexual orientation, or people with specific health conditions. Baseline data were available for 74 percent of the 396 measures in *Healthy People 2010* that listed population groups (11).

Progress toward objective **22.5**, the number of States that periodically analyze and publish data needed to measure progress toward the national health objectives, was assessed by the number of States that publish data from major databases including vital statistics, the BRFSS, hospital discharge systems, and the YRBSS. The Health Care Cost and Utilization Project (HCUP) has been developed to build comparable hospital discharge data sets among States; HCUP contains a subset of the States reporting inpatient hospital discharge data. In 1997, 22 States participated in the national database (12); 26 participated in 1999. The number of States with at least one racial or ethnic group that comprises at least 10 percent of their population that publish vital statistics data for each of these groups is also being tracked. There are 27 States whose populations include at least 10 percent racial and ethnic minorities. In 1999, data on major racial and ethnic groups were published for all of these States, exceeding the *Healthy People 2000* target of 25 States.

Data to measure objective **22.6** (to expand in all States systems for the transfer of year 2000 data among Federal, State, and local agencies) are available for three data systems. All three data systems have met the *Healthy People 2000* target of providing electronic data transfer systems for all States. The National Electronic Telecommunications System for Surveillance (NETSS) is operating in all States and the District of Columbia. In 1995, the Public Health Laboratory Information System (PHLIS) became available in all States and the District of Columbia as well. Electronic access to national monitoring data for Healthy People was provided through DATA2000 on the Centers for Disease Control and Prevention WONDER system from 1995 to 2000. In 2000, DATA2000 was replaced on the CDC WONDER system by DATA2010. DATA2010 provides national and State data to monitor *Healthy People 2010* objectives and represents the expanded data monitoring agenda of the next decade.

The National Center for Health Statistics Internet homepage contains links to State data for a number of *Healthy People 2000* objectives (http://www.cdc.gov/nchs). Since 1997, mortality data have been available through the CDC FTP server; in 1998 *Healthy People 2000* data for natality objectives by State became available. Since 2000, mortality data by State for the years 1989–97 are available in the Data Warehouse section reached through the NCHS homepage (http://www.cdc.gov/nchs/datawh/ftpserv/hstatus/hstatus.htm); race and ethnicity data are provided for 19 causes of death targeted in *Healthy People 2000* and for HIV mortality; and natality data are available from 1993 to 1997. The National Center for Chronic Disease Prevention and Health Promotion has made State data available on the Internet from the BRFSS (http://www2.cdc.gov/nccdphp/brfss/index.asp). Much of these data relate to *Healthy People 2000* objectives.

Achieving the timely release of national surveillance and survey data to measure progress toward the national health objectives (**22.7**), is measured by percent of objectives with data released within 1 year and between 1 and 2 years of data collection. The actual measurement of this objective involves counting the objectives that have updates for a particular year. For the *Healthy People 2000 Final Review*, data collected in 1998 or later are counted as being released within 1 year. Data for 1997 are counted as being released between 1 and 2 years of data collection.

Because all objectives are included in the denominator, the data monitoring objective **22.7** represents an underestimate of the "true" percent of objectives with timely data. Some objectives are not applicable because of achievement through legislation or some other means earlier in the decade, leading to an underestimate of timeliness. In addition, the measurement of progress for this objective is also affected by the periodicity of data collection. Some objectives are tracked with data available annually, such as data from the National Vital Statistics System for objectives targeting mortality rates and the National Notifiable Disease Surveillance System for vaccine-preventable diseases (objective **20.1**). Other objectives are tracked with biennial data, such as data from the YRBSS for objectives targeting adolescents. Other objectives are monitored with data from periodic surveys such as the National Health and Nutrition Examination Surveys for measures of overweight and prevalence of high blood cholesterol. For these surveys, data are counted as timely for years close to the years of data collection only, even though the data may have been released soon after collection.

See table 22 for the tracking data for the objectives in this priority area and figure 22 for a quantitative assessment of progress.

Transition to *Healthy People 2010*

The Healthy People initiative is now in its third decade with the publication of *Healthy People 2010* (11). Healthy People activities during the 1980s and 1990s have demonstrated the central role of data, focused attention on what is important to measure, and stimulated the development of new data systems. The past 20 years in monitoring and reporting on the Healthy People objectives have provided a means for assessing improvements in national health data systems (13). The focus on data and information systems continues in *Healthy People 2010* as a pivotal part of improving the Nation's public health infrastructure, that is, the resources needed to deliver the essential public health services to every community. Seven objectives in the Data and Information Systems section of the *Healthy People 2010* Public Health Infrastructure chapter focus on data issues. The need for data on special population groups, availability of data at subnational levels on important indicators, regular collection and publication of data, and timely release of data are continued as objectives for *Healthy People 2010*. New objectives have been added that focus on the use of geocoding to promote nationwide use of geographic information systems (GIS), and the provision of Internet and e-mail access to public health employees.

Appendix table III, a crosswalk between *Healthy People 2000* and Healthy People 2010 objectives, summarizes the differences between the two decades of objectives, reflecting new knowledge and direction in the area of surveillance and data systems.

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Table 22. Surveillance and Data Systems objectives

Final status		*Objective*	*Baseline year*	*Baseline*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*Target 2000*
■	22.1	**Health status indicators** (HSI)													
		Develop (indicators selected)	1991	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
		Establish use (number of States)													
		Monitoring some indicators	...	---	---	---	48	[1]51	[1]51	[1]51	[1]51	[1]51	[1]51	[1]51	40
		Providing HSI data to local health departments	...	---	---	---	36	---	---	---	---	39	---	---	40
☐	22.2	**National data sources**	1990	[2]77%	...	---	---	93%	93%	[3]96%	97%	[4]97%	[4]97%	[4]97%	100%
		a. State level data for at least two-thirds of State objectives (number of States)[1,5]	1995	42	...	...	...	...	...	...	---	45	---	---	50
☐	22.3	**Comparable data collection procedures**													
		Federal, State, and local agencies	1990	12%	...	---	14%	---	21%	---	---	---	---	---	100%
		Publication of operational definitions and sources for national data	...	---	---	---	---	---	---	---	---	[6]29%	---	[7]72%	...
☐	22.4*	**Identify gaps in health data**	1990	None identified	---	---	---	---	[8]---	[9]---	[10]---	[10]---	[11]---	[11]---	...
		Establish mechanisms to meet needs	1990	None established	---	---	---	---	[8]---	[9]---	[10]---	[10]---	[11]---	[11]---	...
☐	22.5	**Periodic analysis and publication of data**													
		(number of States)	1989	20	---	---	---	---	---	---	---	---	---	---	50
		Vital statistics[1]	...	---	[12]51	51	51	51	51	51	51	51	51	51	50
		Behavioral Risk Factor Surveillance System data[1]	...	---	[12]40	---	49	50	51	51	51	51	51	51	50
		Hospital discharge data[13]	...	---	[12]22	---	---	39	39	39	---	---	---	44	50
		Youth Risk Behavior Survey data[1]	...	---	24	27	---	41	...	41	...	39	...	42	50
		a. Analysis for racial and ethnic groups (number of States)[1,14]	1992	[15]19	...	...	...	[15]23	---	---	22	---	---	[16]27	25
■	22.6	**Number of States with data transfer system data**[1]	1989	30	---	---	---	---	---	---	---	---	---	---	50
		National Electronic Telecommunications System for Surveillance (NETSS)[1]	...	---	---	---	51	51	51	51	51	51	51	51	50
		Public Health Laboratory Information System (PHLIS)	...	---	---	---	37	[1]44	[1]51	[1]51	[1]51	[1]51	[1]51	[1]51	50
		DATA2000 on CDC WONDER/PC[1]	...	---	---	---	---	---	---	51	51	51	51	51	50
☐	22.7	**Timely release of national data** (percent of objectives)													
		Data released within 1 year of collection	1994	65%	...	...	...	...	...	67%	46%	49%	23%	28%	100%
		Data released between 1–2 years of collection	1994	24%	...	...	...	...	...	24%	16%	18%	31%	39%	...

--- Data not available.
... Category not applicable.

Final objective status: ■ Met ☐ Toward ☐ Mixed/ no change ■ Away ☐ Cannot assess

[1] Includes the District of Columbia.
[2] Total number of objectives is 300.
[3] Number of objectives changed from 300 to 319 during the midcourse review.
[4] Baselines were not obtained for 9 of 319 objectives.
[5] States that have adopted *Healthy People 2000* plans.
[6] 6 of 21 *Statistical Notes* have been published. See appendix table VIII.
[7] *Tracking Healthy People 2010* includes 823 measures, 595 of which have complete baseline data and operational definitions.
[8] The National Committee on Vital and Health Statistics established a Subcommittee on State and Community Health Statistics. The Subcommittee's charge (in part) is to work with Federal and State agencies and appropriate private agencies to review and identify gaps in current health statistics.
[9] The *Healthy People 2000 Midcourse Review* added 111 additional subobjectives for major population groups at highest risk for disease, injury, and disability.
[10] As part of the planning process for 2010, data gaps are being identified and mechanisms to address these gaps are being considered.

[11] *Healthy People 2010* is addressing data gaps by requiring data for race, ethnicity, socioeconomic status, and disability measures for population-based objectives and by listing developmental objectives.

[12] 1989 data.

[13] States that collect inpatient hospital discharge data. The number of States with legislative mandates to collect hospital discharge data was 33 in 1999.

[14] Twenty-seven States have at least one racial/ethnic group comprising at least 10 percent of their population; data show number of States that published vital statistics data for these racial/ethnic groups.

[15] Number of all States that published vital statistics data for racial/ethnic groups; racial/ethnic groups may comprise less than 10 percent of State population.

[16] Twenty-seven State Health Profiles provide race/ethnic data for some vital statistics measures.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

Objective number	*Data source*
22.1	CDC, NCHS.
22.2, 22.2a	Baseline: National data: OPHS, ODPHP.
	State data: Public Health Foundation.
	Updates: CDC, NCHS; OPHS, ODPHP.
22.3	CDC, NCHS.
22.4*	Subcommittee on State and Community Health Statistics, NCVHS.
	CDC, NCHS; OPHS, ODPHP.
22.5	1990 data: PHF.
	1989 baselines and updates:
	Vital statistics: CDC, NCHS.
	Behavioral Risk Factor Surveillance System: CDC, NCCDPHP.
	Hospital discharge data: National Association of Health Data Organizations.
	Youth Risk Behavior Survey: CDC, NCCDPHP.
22.5a	CDC, NCHS.
22.6	1989 baseline: PHF.
	1992–97 data:
	NETSS: CDC, EPO.
	PHLIS: CDC, NCID.
	CDC WONDER: CDC, EPO; CDC, NCHS.
22.7	CDC, NCHS.

*Duplicate objective. See full text of objectives following this table.

Surveillance and Data Systems Objectives

22.1: Develop a set of health status indicators appropriate for Federal, State, and local health agencies, and establish use of the set in at least 40 States.

22.2: Identify, and create where necessary, national data sources to measure progress toward each of the year 2000 national health objectives.

> **22.2a**: Identify, and create where necessary, State-level data for at least two-thirds of the objectives in State year 2000 plans in all 50 States.

22.3: Develop and disseminate among Federal, State, and local agencies procedures for collecting comparable data for each of the year 2000 national health objectives and incorporate these into Public Health Service data collection systems.

22.4*: Develop and implement a national process to identify significant gaps in the Nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs.

Duplicate objective: 17.22

22.5: Implement in all States periodic analysis and publication of data needed to measure progress toward objectives for at least 10 of the priority areas of the national health objectives.

> **22.5a**: Implement in 25 States periodic analysis and publication of data needed to measure State progress toward the national or State-specific health objectives for each racial or ethnic group that makes up at least 10 percent of the State population.

22.6: Expand in all States systems for the transfer of health information related to the national health objectives among Federal, State, and local agencies.

22.7: Achieve timely release of national surveillance and survey data needed by health professionals and agencies to measure progress toward the national health objectives.

Appendix

Appendix

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Appendix

Technical Notes

Age Adjustment

Most of the baselines and monitoring data for the population-based *Healthy People 2000* mortality objectives are derived from the National Vital Statistics System (NVSS) operated by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) and are age adjusted to the 1940 population (see Appendix table III) (1). Exceptions are objectives **4.1**, **9.3** (except **9.3d**), **10.1**, and **10.16**. Data for **4.1** and **9.3** (except **9.3d**) are crude rates from the National Highway and Traffic Safety Administration's Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System—FARS). Data for **10.1** are crude rates from the Department of Labor's Annual Survey of Occupational Injuries and Illnesses and Census of Fatal Occupational Injuries. Baseline data for **10.16**, an objective added during the midcourse review, are crude rates from the National Traumatic Occupational Fatality Surveillance System, CDC. Update data are crude rates from the Census of Fatal Occupational Injuries.

For *Healthy People 2010*, data for most of the population-based objectives (including mortality) are age adjusted to the year 2000 standard population. Because this is a different standard than what was used in *Healthy People 2000*, it is difficult to compare the age-adjusted data in *Healthy People 2010* objectives to *Healthy People 2000* objectives with data that are otherwise comparable. A complete discussion on age adjustment to the 2000 standard is available in *Tracking Healthy People 2010* (2).

Cause-of-Death Terminology and Codes

Twenty-six objectives (excluding duplicates) in *Healthy People 2000* are tracked using mortality data. For most of these objectives, the cause-of-death terminology used in *Healthy People 2000* is different from that used in *Health, United States*; *Vital Statistics of the United States, Mortality*, and other NCHS publications; in some cases, the *International Classification of Diseases; Ninth Revision* (ICD–9) codes are different as well (3) (see Appendix table III).

For five objectives, the terminology and the codes are different from those used for similar cause-of-death categories in NCHS publications. One example, objective **7.1**, concerns reduction of homicides. Progress toward this objective is measured using ICD–9 codes E960–E969. NCHS generally uses "homicide and legal intervention" (ICD–9 codes E960–E978), which includes "legal intervention" or "police action." For 14 objectives, only the terminology differs; the defining ICD–9 identifying codes are the same. For example, objective **15.2** calls for reduction in mortality from "stroke"; NCHS tabulation lists use the term "cerebrovascular diseases" (both use ICD–9 numbers 430–438). Only one objective, suicide, has the same title and the same code structure in both uses. The remaining six mortality objectives have no comparable category in NCHS publications. With the exception of heart disease, the differences between mortality rates defined by the *Healthy People 2000* ICD–9 categories and those defined by NCHS rubrics are relatively small, if not trivial.

Healthy People 2010 baselines use the *International Classification of Diseases; Ninth Revision* (ICD–9, ICD–9–CM) codes to define baseline measures. Future tracking data for *Healthy People 2010* will incorporate the *International Classification of Diseases; Tenth Revision* (ICD–10, ICD–10–CM). Once implemented, revised coding guidelines, training materials, and crosswalks between ICD–9/ICD–9–CM and ICD–10/ICD–10–CM will be made available on the NCHS Web site (http://www.cdc.gov/nchs).

Census Poverty Threshold

Data for subobjectives targeting family income below the poverty level are based on definitions originally developed by the Social Security Administration. They include a set of income thresholds that vary by family size and composition. Families or individuals with income below the appropriate thresholds are classified as below the poverty level. These thresholds are updated annually by the U.S. Bureau of the Census. The weighted-average poverty threshold for a family of four was $14,335 in 1992, $14,764 in 1993, $15,141 in 1994, $15,569 in 1995, $16,036 in 1996, $16,400 in 1997, $16,660 in 1998, and $17,029 in 1999 (4).

Data Source Comparability

For some objectives the baseline data source differs from the source used to monitor progress. Comparability between different data sources or even within the same data source for different years is not ensured. Comparability can be compromised by changes in survey questions, survey systems, survey methodology, operational definitions, and analytic techniques. Some of the most important comparability issues related to specific objectives are discussed in the Data Issues section of the priority area chapters. Other issues related to tracking the objectives are addressed in *Healthy People Statistical Notes* Number 4, Issues Related to Monitoring the Year 2000 Objectives (5). The data source for each *Healthy People 2000* objective is shown at the end of the summary data table in each priority area chapter.

Disparity Measurement

A major goal of *Healthy People 2000* is to reduce disparity in health status between special populations (SP) at high risk for death, disease, or disability, and the population as a whole. As appropriate, the 319 main objectives identified these special populations as subobjectives. During the *midcourse review* and 1995 revisions, additional SP objectives were included (6). For these special population subobjectives, the statistic used to track the overall objective is, then, considered the measure for the reference population (RP). Disparity is a function of the difference between the relative rates of change for the SP and RP. In many instances, different targets were set for the SP and RP. These targets were set with the aim of reducing the gap between these racial and ethnic groups and the total population, that is, targeting a greater percent change for the SP.

A method for measuring disparity and change in disparity was not specified in *Healthy People 2000* (7). In preparation for this *Final Review*, a working group of agency representatives from the U.S. Department of Health and Human Services evaluated several methods for measuring change in disparity. In some instances the work group found that different methods used for the same data yielded different conclusions regarding the widening or narrowing of disparity.

Ultimately, the ratio of percent changes was chosen to measure the change in disparity for several reasons. As noted above, the targets for SP and RP were chosen to decrease disparity. Therefore, if both targets were attained, the ratio of the percent changes would be less than 1.0 and the disparity would be narrowed. The ratio was also chosen because it is widely used to describe relative change between two populations. In measuring disparity for the special population groups, objectives that were duplicated in more than one chapter were counted only once.

The ratio of percent change is calculated as:

$$\frac{\left(\dfrac{RP_{most\ recent} - RP_{baseline}}{RP_{baseline}}\right)}{\left(\dfrac{SP_{most\ recent} - SP_{baseline}}{SP_{baseline}}\right)}$$

The ratio of percent change is not a measure of the direction of change; it is a measure of relative change. Consequently, the ratio can be less than 1.0, indicating a narrowing of the disparity, if data for the SP indicate that:

- SP is moving toward the SP target at a relative rate greater than the RP is moving toward the RP target;
- SP progress is toward the SP target but RP is moving away from the RP target; or
- SP is moving away from the SP target at a relative rate less than the RP movement.

A conclusion of a widening disparity, that is, a ratio greater than 1.0, can result if data for the SP indicate that:

- SP is moving away from the SP target although the RP is moving toward the RP target;
- SP is moving toward the SP target at a relative rate less than the RP movement; or
- SP is moving away from the SP target at a relative rate larger than the RP movement.

Some special population objectives or subobjectives were not constructed to assess disparity. In these cases, disparity measurement was not applicable. These include:

- SP measure was part of a main objective and had no RP. Examples of this include attempting to measure disparities for women when the main objective targeted only women, such as mammogram screening. There is no reference population.
- SP was better than RP at baseline. In most cases, these objectives are excluded from the disparity assessment. Some of these objectives did show a disparity at the end of the decade.

These disparities will be tracked by *Healthy People 2010* in support of its goal to eliminate health disparities.

For the other special population objectives or subobjectives, disparity measurement was applicable, but in several instances could not be assessed (due to data limitations):

- SP or RP measure had missing or incomplete baseline, update, and/or target data;
- RP measure was not comparable to the SP measure.

To obtain a full picture of the progress of the SP subobjectives, the disparity measure can be combined with the progress quotient calculated for the subobjective separately. This combined picture is presented for each SP in the charts of the "Reducing Disparity" section of the *Review*. In that section, the summary of progress is presented for nine of the special populations: adolescents and young adults, American Indian/Alaska Native, Asian or Pacific Islander, black or African American, Hispanic or Latino, older adults, people with disabilities, people with low socioeconomic status, and women. In each chart, the pie indicates the proportion of objectives for which the disparity of the special population was eliminated or narrowing, showed no change, was widening, or could not be assessed using the ratio of percent change statistic. Progress toward or away from the target was then assessed for those objectives in which the disparity was either eliminated or narrowing. The progress is displayed in the chart as a bar showing the proportion of these objectives for which data indicate the special population met its target, moved either toward or away from the target, or made no change.

Geographic Coverage

Data used to track the *Healthy People 2000* objectives are, where available, for the 50 States and the District of Columbia. In cases where complete U.S. data are not available, subnational data (if they exist) are used as a proxy. For all objectives, data for U.S. territories are excluded.

Hispanic Vital Statistics

There are nine subobjectives targeting mortality reduction for Hispanic populations (**4.2c**, **4.3b**, **7.1d**, **9.1d**, **9.3g**, **9.6g**, **16.4b**, **17.9c**, and **17.9d**). For objective **7.1d**, the only subobjective with pre-1990 data, the 1987–89 baseline and tracking data are based on deaths to residents of selected States that had data that were at least 90 percent complete on a place-of-occurrence basis and considered to be sufficiently comparable. Beginning with data for 1990 for all Hispanic subobjectives, the criterion was changed to include States with data that were at least 80 percent complete. The number of States in the mortality reporting area increased from 18 States and the District of Columbia in 1987 to 49 States and the District of Columbia in 1993.

Hispanic origin data for low/very low birth weight (**14.5c,d**) and prenatal care in the first trimester (**14.11c**) are based on States that reported Hispanic parentage on the birth certificate. The number of States in the natality reporting area increased from 23 States and the District of Columbia in 1987 to all 50 States and the District of Columbia in 1993. The reporting area for infant mortality data from the national linked file of live births and infant deaths for Puerto Ricans (**14.1c**, **f**, and **j**) increased from 23 States and the District of Columbia in 1984 to 49 States and the District of Columbia in 1991. Since 1991, only Oklahoma does not report Hispanic origin for deaths.

A listing of the States included in the reporting areas for each year and more information can be found in another publication (8).

Measuring Progress Toward the *Healthy People 2000* Targets

A primary purpose of the *Healthy People 2000 Final Review* is reporting the progress the 319 objectives made in reaching their year 2000 targets by the end of the decade. The priority area chapters in this *Review* contain a bar chart illustrating the status of each objective measure in reference to its year 2000 target. Progress in these charts is measured using the percentage of targeted change that was achieved, or the "progress quotient." This is the same progress measure used in the *Healthy People 2000 Midcourse Review and 1995 Revisions* (6).

The formula for the progress quotient is:

$$\left(\frac{\textit{most recent value} - \textit{baseline value}}{\textit{year 2000 target} - \textit{baseline value}}\right) \times 100$$

The progress quotient allows for comparisons to be made between objectives and between priority areas regarding the degree of change attained compared with the change desired, as reflected in the target set in 1990. There are, however, some limitations to the interpretation of these statistics. The progress quotient reflects the difference between the data for the baseline year and the most recent data year only; thus, fluctuations in the measure over the decade are not reflected. Also, the amount of change required to attain the target differed among objectives. Therefore, equal progress quotients do not reflect equal percent changes from the baseline, which would be calculated using only the baseline data in the denominator. Finally, because information on variability of the measures was not available for all objectives, the actual change toward the target is used to determine progress. Some of these changes are relatively small and could be within what could be expected on the basis of sampling or random variation. This is particularly true for small subpopulations, such as Asians and Pacific Islanders and American Indians/Alaska Natives.

The priority area bar charts display progress quotients for each objective measure. If more than one measure was used to evaluate an objective, the status of each measure is displayed separately. Depending on the data, bar charts depict progress in one of the following ways:

- When the most recent data were the same as the data from the baseline year, there was no progress and the progress quotient is 0 percent. This is noted in the bar charts as "no change."
- When the most recent data fall between the baseline year data and the year 2000 target, there was progress, although the target was not attained. In this case, the progress quotient is between 0 and 100 percent, and the bar is displayed as light green.
- When the most recent data are equal to or better than the year 2000 target, the objective was met or exceeded. In this case, the progress quotient is at least 100 percent, and the bar is displayed as dark green. If the progress quotient is greater than 100 percent, the actual percent is printed on the bar; however, graphically the bar is drawn as 100 percent.
- When the most recent data are worse than the baseline data, the objective changed in a direction away from the target, and the progress quotient is negative. In this case, the bar is displayed as burgundy. If the negative change is less than 100 percent, the actual percent is printed on the bar; graphically, however, the bar is drawn as –100 percent.

In several situations, the progress quotient was not calculated. These include when:

- The baseline year data and/or more recent data were not available.
- Objectives have targets stated as "slow the rise" of the rate of a particular condition or equal to the baseline rate. In these cases, a meaningful progress quotient could not be calculated; however, in the bar chart such measures are labeled as "met" or "away" depending on the direction of the change.
- Objectives had a baseline value that was already "better" than the target value.
- Objectives contained multiple parts for which data were unavailable. For instance, for the objectives tracking clinical counseling, data more recent than the baseline were available only for nurse practitioners. Tracking data were unavailable for the other provider specialities.

Specific discussion of some of the objectives for which progress quotients were not calculated can be found in the Data Issues section of each priority area chapter.

Mortality Data by Race and Hispanic Origin

Death rates by race and Hispanic origin are based on information from death certificates (numerators of the rates) and on population estimates from the Census Bureau (denominator). Race and ethnicity information on the death certificate are reported by the funeral director as provided by an informant, often the surviving next of kin, or, in the absence of an informant, on the basis of observation. Race and ethnicity information from the census is by self-report. To the extent that race and Hispanic origin are inconsistent between these two data sources, death rates will be biased. Studies have shown that persons self-reported as American Indian, Asian, or Hispanic on census and survey records may sometimes be reported as white or non-Hispanic on the death certificate, resulting in an underestimation of deaths and death rates for the American Indian, Asian, and Hispanic groups. Bias also results from undercounts of some population groups in the census, particularly young black and white males and elderly persons, resulting in an overestimation of death rates. The net effects of misclassification and under coverage result in overstated death rates for the white population and the black population are estimated to be 1 percent and 5 percent, respectively; understated death rates for other population groups are estimated as follows: American Indians, 21 percent; Asian or Pacific Islanders, 11 percent; and Hispanics, 2 percent (9).

Vital event rates for the American Indian/Alaska Native population shown in this book are based on the total U.S. resident population of American Indians and Alaska Natives as enumerated by the U.S. Bureau of Census. In contrast the Indian Health Service calculates vital event rates for this population based on U.S. Bureau of Census county data for American Indians and Alaska Natives who reside on or near reservations.

Racial and ethnic classification for infant deaths is substantially improved by using the linked birth and infant death file, which uses the race of the mother as self-reported on the birth certificate instead of the race of child as reported on the death certificate. The infant mortality rates for Puerto Ricans and American Indians/Alaska Natives shown in objectives **14.1b, c, f, i,** and **j** used data from the linked file.

National Health Interview Survey Redesign

The National Health Interview Survey (NHIS) is a continuing nationwide sample survey in which data are collected through personal household interviews. The NHIS is the primary data source for *Healthy People 2000*, tracking 20 percent of the objectives.

In 1997, the collection methodology changed from paper and pencil questionnaires to computer-assisted personal interviewing (CAPI). The

NHIS questionnaire was also revised extensively in 1997. The survey changed from two components (Core and Topic Supplements) to now consisting of three components (Family Core, Sample Adult Core, Sample Child Core) and periodic and topical modules. In some instances, basic concepts measured in the NHIS changed and in other instances the same concepts were measured in a different way. While some questions remain the same over time, they may be preceded by different questions or topics. For some questions, there was a change in the reference period for reporting an event or condition (8).

Because of this extensive redesign of the questionnaire in 1997 and the introduction of the CAPI method of data collection, data from 1997 and later years may not be comparable with earlier years. When data are not comparable because of these survey revisions, the data from 1997 and later years have been omitted and denoted with a footnote "‡."

Sources of Monitoring Data and Information

Relevant Internet sites include the following:

- The *Healthy People 2000* home page (http://odphp.osophs.dhhs.gov/pubs/hp2000): Contains connections to many activities related to *Healthy People 2000* including lead agency contacts for the priority areas, progress review reports, the *Healthy People 2000* Consortium, and more.
- The National Health Information Center (NHIC) home page (http://nhic-nt.health.org): Serves as a health information referral service that enables health professionals and consumers who have health questions to contact organizations that are best able to provide answers. Many documents related to *Healthy People 2000* can be located at this site. NHIC was established in 1979 by the Office of Disease Prevention and Health Promotion (ODPHP), Office of Public Health and Science, Office of the Secretary, U.S. Department of Health and Human Services.
- The NCHS home page (http://www.cdc.gov/nchs) and the NCHS Healthy People home page (http://www.cdc.gov/nchs/hphome.htm): The NCHS site provides statistical information on vital events as well as information on health status, lifestyle and exposure to unhealthy influences, the onset and diagnosis of illness and disability, and the use of health care. The NCHS Healthy People site provides links to previous *Healthy People 2000 Reviews*, data presentations from past *Healthy People 2000 Progress Reviews*, and provides other related links to organizations and data systems associated with monitoring *Healthy People 2000*. Data for recent years are available for the Health Status Indicators (HSIs) and the Priority Data Needs (PDNs) in files that can be downloaded through the CDC FTP-server at http://www.cdc.gov/nchswww/datawh/datawh.htm.
- The *Healthy People 2010* home page (http://www.health.gov/healthypeople): Contains links to many *Healthy People 2010* activities including related publications (*Healthy People 2010* with *Understanding and Improving Health* and *Objectives for Improving Health*, and *Tracking Healthy People 2010*), Leading Health Indicators, lead agency contacts for the focus areas, and the Healthy People Consortium.
- The DATA2010 home page (http://wonder.cdc.gov/data2010): Contains the most recent data tracking the *Healthy People 2010* objectives, provides data by State, race and ethnicity, gender, socioeconomic status, disability status, and geographic location.

A valuable resource for public health professionals wishing to measure and track data comparable to the national *Healthy People 2000* objectives is presented as a series of publications entitled *Healthy People Statistical Notes*. This series contains information on the HSIs, monitoring issues, operational definitions, and other issues related to tracking the *Healthy People 2000* objectives. For a list of these publications, see Appendix table VI. The full text of *Healthy People Statistical Notes* numbers 6 through the present can be found on the NCHS Healthy People home page (http://www.cdc.gov/nchs/products/pubs/pubd/hp2k/hp2k.htm#Statistical Notes).

NCHS has also presented a course entitled "Measuring the Healthy People 2000 Objectives" through the Applied Statistics Training Institute (ASTI) in several locations around the country. This course targeted health professionals and others working in areas of public health in government agencies and private organizations, addressed specific measurement issues related to monitoring progress toward selected *Healthy People 2000* objectives and HSIs. A number of objectives that presented unusual problems or required the use of complex algorithms were discussed (for example, years of healthy life; light, moderate, vigorous physical activity; overweight prevalence; and air quality). Data comparability, the *International Classification of Disease* (ICD) codes for mortality data, computation of age-adjusted death rates, and a demonstration of using statistical data on the Internet were also included.

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Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators

1. Access to Quality Health Services

David Atkins, M.D., M.P.H.
Medical Officer
Center for Practice and Technology Assessment
Agency for Healthcare Research and Quality
6010 Executive Boulevard, Suite 300
Rockville, MD 20852
(301) 594-4016/Fax (301) 594-4027
E-mail: datkins@ahrq.gov

Melissa Clarke, M.P.A.
Senior Health Policy and Program Analyst
Healthy People 2000/2010 Coordinator
Office of Planning, Evaluation, and Legislation
Health Resources and Services Administration
Parklawn Building, Room 14-33
5600 Fishers Lane
Rockville, MD 20857
(301) 443-5277/Fax (301) 443-9270
E-mail: mclarke@hrsa.gov

Paul Nannis, M.S.W.
Director
Office of Planning, Evaluation and Legislation
Health Resources and Services Administration
Parklawn Building, Room 14-33
5600 Fishers Lane
Rockville, MD 20857
(301) 443-2460/Fax (301) 443-9270
E-mail: pnannis@hrsa.gov

Kathryn Rickard, M.P.A.
Program Analyst
Center for Practice and Technology Assessment
Agency for Healthcare Research and Quality
6010 Executive Boulevard, Suite 300
Rockville, MD 20852
(301) 594-2431/Fax (301) 594-4027
E-mail: krickard@ahrq.gov

2. Arthritis, Osteoporosis, and Chronic Back Conditions

Charles G. Helmick, M.D.
Medical Epidemiologist
Health Care and Aging Studies Branch
Division of Adult and Community Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K45
Atlanta, GA 30341
(770) 488-5456/Fax (770) 488-5964
E-mail: cgh1@cdc.gov

Reva Lawrence, M.P.H.
Epidemiologist/Data Systems Program Officer
National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Institutes of Health
45 Center Drive, MS 6500 Bethesda, MD 20892
(301) 594-5014/Fax (301) 402-2406
E-mail: rl27b@nih.gov

Paul Scherr, Ph.D., D.Sc.
Supervisory Epidemiologist
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K45
Atlanta, GA 30341
(770) 488-5454/Fax (770) 488-5964
E-mail: pas@cdc.gov

3. Cancer

Barry Portnoy, Ph.D.
Cancer Planning and Program Officer
National Cancer Institute
National Institutes of Health
Building 31, Room 10A49
31 Center Drive, MSC 2580
Bethesda, MD 20892-2580
(301) 496-9569/Fax (301) 496-9931
E-mail: bp22z@nih.gov

Karen Richard, M.P.A.
Public Health Advisor
National Center for Chronic Disease
Prevention and Health Promotion
Division of Cancer Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K64
Atlanta, GA 30341
(770) 488-4737/Fax (770) 488-4760
E-mail: kmr4@cdc.gov

4. Chronic Kidney Disease

Lawrence Agodoa, M.D.
Program Director
Division of Kidney Urologic and Hematologic Diseases
National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Building 45, Room 6AS-13B
45 Center Drive
Bethesda, MD 20892-6600
(301) 594-7717/Fax (301) 480-3510
E-mail: la21j@nih.gov

5. Diabetes

Benjamin Burton, Ph.D.
Emeritus Scientist
National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Building 45, Room 6AN38J
45 Center Drive
Bethesda, MD 20892
(301) 594-6867/Fax (301) 480-4237
Email: burtonb@extra.niddk.nih.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

Bill Foster, M.D.
Senior Staff Physician
National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Building 31, Room 9A21
45 Center Drive
Bethesda, MD 20892
(301) 435-2991/Fax (301) 396-2830
E-mail: fosterb@hq.niddk.nih.gov

Frank M. Vinicor, M.D.
Director
Division of Diabetes Translation
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K10
Atlanta, GA 30341-3724
(770) 488-5000/Fax (770) 488-5966
E-mail: fxv1@cdc.gov

6. Disability and Secondary Conditions

Chris Kochtitzky, M.S.P.
Policy Analyst
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F29
Atlanta, GA 30341-3724
(770) 488-7114/Fax (770) 488-7024
E-mail: csk3@cdc.gov

Don Lollar, Ed.D.
Director
Office on Disability and Health
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F29
Atlanta, GA 30341-3724
(770) 488-7094/Fax (770) 488-7075
E-mail: DCL5@cdc.gov

Katherine Seelman, Ph.D.
Director
National Institute on Disability and Rehabilitation Research
U.S. Department of Education
Switzer Building, Room 3060
330 C Street, S.W.
Washington, DC 20202
(202) 205-8134/Fax (202) 205-8997
E-mail: kate_seelman@ed.gov

Lisa Sinclair, M.P.H.
Health Policy Analyst
Office on Disability and Health
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F29
Atlanta, GA 30341-3724
(770) 488-7667
Email: lvs4@cdc.gov

7. Educational and Community-Based Programs

Melissa Clarke, M.P.A.
Senior Health Policy and Program Analyst
Healthy People 2000/2010 Coordinator
Office of Planning, Evaluation and Legislation
Health Resources and Services Administration
Parklawn Building, Room 14-33
5600 Fishers Lane
Rockville, MD 20857
(301) 443-5277/Fax (301) 443-9270
E-mail: mclarke@hrsa.gov

Catherine A. Hutsell, M.P.H.
Health Education Specialist
Community Health and Program Services
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K30
Atlanta, GA 30341-3717
(770) 488-5438/FAX (770) 488-5974
E-mail: czh2@cdc.gov

Brick Lancaster, M.A., CHES
Associate Director for Health Education
Practice and Policy
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K45
Atlanta, GA 30341-3724
(770) 488-5269/Fax (770) 488-5964
E-mail: blx0@cdc.gov

Paul Nannis, M.S.W.
Director
Office of Planning, Evaluation, and Legislation
Health Resources and Services Administration
Parklawn Building, Room 14-33
5600 Fishers Lane
Rockville, MD 20857
(301) 443-2460/Fax (301) 443-9270
E-mail: pnannis@hrsa.dhhs.gov

8. Environmental Health

David Evans
Senior Program Analyst
Office of Policy and External Affairs
Agency for Toxic Substances and Disease Registry
1600 Clifton Road, N.E., MS E60
Atlanta, GA 30333
(404) 639-0500/Fax (404) 639-0522
E-mail: eevans@cdc.gov

David Homa, Ph.D., M.P.H.
Epidemiologist
Air Pollution and Respiratory Health Branch
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E17
Atlanta, GA 30333
(404) 639-2544/Fax (404) 639-2560
E-mail: dgh3@cdc.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

William Jirles, M.P.H.
Program Analyst
Office of Policy, Planning, and Evaluation
National Institute of Environmental Health Sciences
National Institutes of Health
Building 101, Room B224
111 Alexander Drive, MS B2-08
Research Triangle Park, NC 27709
(919) 541-2637/Fax (919) 541-4737
E-mail: jirles@niehs.nih.gov

Chris Kochtitzky, M.S.P.
Policy Analyst
Office of Planning, Evaluation, and Legislation
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F29
Atlanta, GA 30341-3724
(770) 488-7114/Fax (770) 488-7024
E-mail: csk3@cdc.gov

Mark McClanahan, Ph.D.
Health Studies Branch
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E23
Atlanta, GA 30333
(404) 639-2562/Fax (404) 639-2565
E-mail: mam4@cdc.gov

Sheila Newton, Ph.D.
Director
Office of Policy, Planning, and Evaluation
National Institute of Environmental Health Sciences
National Institutes of Health
Building 101, Room B250
111 Alexander Drive, MS B2-08
Research Triangle Park, NC 27709
(919) 541-3484/Fax (919) 541-4737
E-mail: newton1@niehs.nih.gov

Carol Pertowski, M.D.
Associate Director for Science
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS G317
Atlanta, GA 30333
(404) 639-2500/Fax (404) 639-2555
E-mail: cap4@cdc.gov

John Schelp, M.P.A.
Office of Policy, Planning, and Evaluation
National Institute of Environmental Health Sciences
National Institutes of Health
Building 101, Room B218
111 Alexander Drive, MS B2-08
Research Triangle Park, NC 27709
(919) 541-5723/Fax (919) 541-2260
E-mail: schelp@niehs.nih.gov

9. Family Planning

Evelyn Kappeler
Senior Policy Analyst
Office of Population Affairs
Office of Public Health and Science
Suite 200 West
4350 East West Highway
Bethesda, MD 20814
(301) 594-7608/Fax (301) 594-5980
E-mail: ekappeler@osophs.dhhs.gov

10. Food Safety

Elisa L. Elliot, Ph.D.
Microbiologist
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C Street, S.W., HFS-615
Washington, DC 20204
(202) 205-4018/Fax (202) 260-0136
E-mail: Elisa.Elliot@cfsan.fda.gov

Ruth Etzel, M.D., Ph.D.
Director
Division of Epidemiology and Risk Assessment
Food Safety and Inspection Service
U.S. Department of Agriculture
Franklin Court Building, Room 3718
1400 Independence Avenue, S.W.
Washington, DC 20250
(202) 501-7373/Fax (202) 501-6982
E-mail: ruth.etzel@usda.gov

11. Health Communication

Cynthia Baur, Ph.D.
Policy Advisor, Interactive Health
Communication
Office of Disease Prevention and Health Promotion
Office of Public Health and Science
200 Independence Avenue, S.W., Room 738G
Washington, DC 20201
(202) 205-2311/Fax (202) 205-0463
E-mail: cbaur@osophs.dhhs.gov

Mary Jo Deering, Ph.D.
Director
Health Communication and Telehealth Staff
Office of Disease Prevention and Health Promotion
Office of Public Health and Science
200 Independence Avenue, S.W., Room 738G
Washington, DC 20201
(202) 260-2652/Fax (202) 205-0463
E-mail: mdeering@osophs.dhhs.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

12. Access to Quality Health Services

Robinson Fulwood, Ph.D., M.S.P.H.
Senior Manager for Public Health Program Development
Office of Prevention, Education, and Control
National Heart, Lung, and Blood Institute
National Institutes of Health
Building 31, Room 4A03
31 Center Drive MSC 2480
Bethesda, MD 20892-2480
(301) 496-0554/Fax (301) 480-4907
E-mail: fulwoodr@nih.gov

Kurt Greenlund, Ph.D.
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K47
Atlanta, GA 30341-3717
(770) 488-2572/Fax (770) 488-8151
E-mail: keg9@cdc.gov

Claude Lenfant, M.D.
Director
National Heart, Lung, and Blood Institute
National Institutes of Health
31 Center Drive MSC 2486
Bethesda, MD 20892-2486
(301) 496-5166/Fax (301) 480-4907

Zhi-Jie Zheng, M.D., Ph.D.
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K47
Atlanta, GA 30341-3717
(770) 488-8058/Fax (770) 488-8151
E-mail: zzheng@cdc.gov

13. HIV

Emily DeCoster, M.P.H.
Office of Policy and Program Development
HIV/AIDS Bureau
Health Resources and Services Administration
Parklawn Building, Room 7-20
5600 Fishers Lane
Rockville, MD 20857
(301) 443-1381/Fax (301) 443-3323
E-mail: edecoster@hrsa.gov

Gena Hill, M.P.H.
Program Analyst
Office of Planning, Policy, and Coordination
National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E07
Atlanta, GA 30333
(404) 639-8008/Fax (404) 639-8600
E-mail: gfh5@cdc.gov

Eva Margolies-Seiler
Associate Director for Planning, Policy, and Coordination
National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E07
Atlanta, GA 30333
(404) 639-8008/Fax (404) 639-8600
E-mail: eam1@cdc.gov

14. Immunization and Infectious Diseases

Jennifer Brooks, M.P.H.
Program Analyst
Office of Policy, Planning, and Legislation
National Center for Infectious Diseases
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS C12
Atlanta, GA 30333
(404) 639-4915/Fax (404) 639-2715
E-mail: jlc9@cdc.gov

James Hughes, M.D.
Director
National Center for Infectious Diseases
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS C12
Atlanta, GA 30333
(404) 639-3401/Fax (404) 639-3039
E-mail: jmh2@cdc.gov

Martin Landry
Associate Director
Planning, Evaluation, and Legislation
National Immunization Program
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E05
Atlanta, GA 30333
(404) 639-8200/Fax (404) 639-8626
E-mail: mgl0@cdc.gov

Walter Orenstein, M.D.
Director
National Immunization Program
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E05
Atlanta, GA 30333
(404) 639-8200/Fax (404) 639-8626
E-mail: wao1@cdc.gov

Rosemary Ramsey
Associate Director
Policy, Planning, and Legislation
National Center for Infectious Diseases
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS C12
Atlanta, GA 30333
(404) 639-3484/Fax (404) 639-2715
E-mail: rbr2@cdc.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

Nicole Smith, M.P.H., M.P.P.
Program Analyst
Office of Planning, Evaluation, and Legislation
National Immunization Program
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E05
Atlanta, GA 30333
(404) 639-8711/Fax (404) 639-8626
E-mail: nbs8@cdc.gov

15. Injury and Violence Prevention

LaTanya Butler
Deputy Director
Division of Unintentional Injury
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K63
Atlanta, GA 30341-3724
(770) 488-4652/Fax (770) 488-1317
E-mail: lab1@cdc.gov

Alex Crosby, M.D., M.P.H.
Medical Epidemiologist
Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K60
Atlanta, GA 30341
(770) 488-4272/Fax (770) 488-4349
E-mail: aec1@cdc.gov

Tim W. Groza, M.P.A.
Public Health Advisor
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K63
Atlanta, GA 30341-3724
(770) 488-4676/Fax (770) 488-1317
E-mail: twg1@cdc.gov

Martha Highsmith
Program Analyst
Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K60
Atlanta, GA 30341-3724
(770) 488-4276/Fax (770) 488-4349
E-mail: mah3@cdc.gov

Laura Yerdon Martin
Assistant Deputy for Policy and Planning
Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K60
Atlanta, GA 30341-3724
(770) 488-4276/Fax (404) 488-4349
E-mail: lym1@cdc.gov

16. Maternal, Infant, and Child Health

Isabella Danel, M.D., M.Sc.
Deputy Chief
Pregnancy and Infant Health Branch
Division of Reproductive Health
National Center for Chronic Disease Prevention and Health Promotion
4770 Buford Highway, N.E.
Atlanta, GA 30341
(770) 488-5187/Fax (770) 488-5628
E-mail: ixd1@cdc.gov

Charlotte Dickinson, Ph.D.
Planning and Communications Officer
National Center for Environmental Health
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F34
Atlanta, GA 30341-3724
(770) 488-7155/Fax (770) 488-7156
E-mail: cmd1@cdc.gov

Stella Yu, Sc.D., M.P.H.
Statistician
Maternal and Child Health Bureau
Health Resources and Services Administration
Parklawn Building, Room 18A-55
5600 Fishers Lane
Rockville, MD 20857
(301) 443-0695/Fax (301) 443-4842
E-mail: syu@hrsa.gov

17. Medical Product Safety

Linda Brophy, R.N., M.N., M.P.H.
Special Assistant
Office of Post-Marketing Drug Risk Assessment
Center for Drug Evaluation and Research
Food and Drug Administration
Parklawn Building, MS HFD 400
5600 Fishers Lane
Rockville, MD 20857
(301) 827-3193/Fax (301) 443-9664
E-mail: brophyl@cder.fda.gov

18. Mental Health and Mental Disorders

Michele Edwards, M.S., A.C.S.W.
Healthy People Coordinator
Center for Mental Health Services
Substance Abuse and Mental Health Services Administration
Parklawn Building, Room 17C-06
5600 Fishers Lane
Rockville, MD 20857
(301) 443-7790 x8/Fax (301) 443-7912
E-mail: medwards@samhsa.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

Doreen S. Koretz, Ph.D.
Associate Director for Prevention
Chief, Developmental Psychopathology
and Prevention Research Branch
National Institute of Mental Health
National Institutes of Health
Neuroscience Center Building, Room 6196
6001 Executive Boulevard
Bethesda, MD 20892-9617
(301) 443-5944/Fax (301) 480-4415
E-mail: dkoretz@nih.gov

19. Nutrition and Overweight

Nancy T. Crane, M.S., M.P.H., R.D.
Nutritionist
Division of Nutrition Science and Policy
Office of Nutritional Products, Labeling, and
Dietary Supplements (HFS-830)
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C Street, S.W.
Washington, DC 20204
(202) 205-5615/Fax (202) 205-5532
E-mail: ncrane@bangate.fda.gov

Van S. Hubbard, M.D., Ph.D.
Director, NIH Division of Nutrition
Research Coordination, and Chief,
Nutritional Sciences Branch
National Institute of Diabetes and
Digestive and Kidney Diseases
National Institutes of Health
Rockledge 1, Suite 8048
6705 Rockledge Drive MSC 7973
Bethesda, MD 20892-7973
(301) 594-8822/Fax (301) 480-3768
E-mail: vh16h@nih.gov or van_hubbard@nih.gov

Christine J. Lewis, Ph.D., R.D.
Director
Office of Nutritional Products, Labeling, and
Dietary Supplements (HFS-800)
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C Street, S.W.
Washington, DC 20204
(202) 205-4561/Fax (202) 205-5295
E-mail: clewis1@bangate.fda.gov

Pamela E. Starke-Reed, Ph.D.
Deputy Director
NIH Division of Nutrition Research
Coordination
National Institute of Diabetes and Digestive
and Kidney Diseases
National Institutes of Health
Rockledge 1, Suite 8048
6705 Rockledge Drive, MSC 7973
Bethesda, MD 20892-7973
(301) 594-8805/Fax (301) 480-3768
E-mail: ps39p@nih.gov

20. Occupational Safety and Health

Regina Pana-Cryan
Senior Service Fellow
Office of Policy and Legislation
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
200 Independence Avenue, S.W., Room 715H
Washington, DC 20201
(202) 401-3741/Fax (202) 260-4464
E-mail: rfp2@cdc.gov

21. Oral Health

Alice M. Horowitz, Ph.D.
Senior Scientist
National Institute of Dental and Craniofacial Research
National Institutes of Health
Building 45, Room 3AN-44B
45 Center Drive, MSC 6401
Bethesda, MD 20892-6401
(301) 594-5391/Fax (301) 480-8254
E-mail: alice.horowitz@nih.gov

Candace M. Jones, M.P.H.
Health Resources and Services Administration
Parklawn Building, Room 6A-30
5600 Fishers Lane
Rockville, MD 20857
(301) 443-1106/Fax (301) 594-6610
E-mail: jonesc@hqe.ihs.gov

Stuart A. Lockwood, D.M.D., M.P.H.
Dental Officer
Surveillance Investigation Research Branch
Division of Oral Health
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS F10
Atlanta, GA 30341
(770) 488-6067/Fax (770) 488-6080
E-mail: sal4@cdc.gov

22. Physical Activity and Fitness

Carol Macera, Ph.D.
Senior Epidemiologist
Division of Nutrition and Physical Activity
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K46
Atlanta, GA 30341-3724
(770) 488-5018/Fax (770) 488-5473
E-mail: cam4@cdc.gov

Christine Spain
Director
Research, Planning, and Special Projects
President's Council on Physical Fitness and Sports
Office of Public Health and Science
200 Independence Avenue, S.W., Room 731
Washington, DC 20201
(202) 690-5148/Fax (202) 690-5211
E-mail: cspain@osophs.dhhs.gov

Table I. *Healthy People 2010* Lead Agencies and Work Group Coordinators—Con.

23. Public Health Infrastructure

Carol Roddy, J.D.
Senior Advisor to the Administrator
Center for Public Health Practice
Health Resources and Services Administration
Parklawn Building, Room 14-15
5600 Fishers Lane
Rockville, MD 20857
(301) 443-4034/Fax (301) 443-0192
E-mail: croddy@hrsa.gov

Diane Rodill, Ph.D.
Center for Public Health Practice
Health Resources and Services Administration
Parklawn Building, Room 14-15
5600 Fishers Lane
Rockville, MD 20857
(301) 443-0062/Fax (301) 443-0192
E-mail: drodill@hrsa.gov

Pomeroy Sinnock, Ph.D.
Division of Public Health
Public Health Practice Program Office
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K39
Atlanta, GA 30341-3724
(770) 488-2469/Fax (770) 488-2489
E-mail: pxs1@cdc.gov

24. Respiratory Diseases

Robinson Fulwood, Ph.D., M.S.P.H.
Senior Manager for Public Health Program Development
Office of Prevention, Education, and Control
National Heart, Lung, and Blood Institute
National Institutes of Health
Building 31, Room 4A03
31 Center Drive MSC 2480
Bethesda, MD 20892-2480
(301) 496-0554/Fax (301) 480-4907
E-mail: fulwoodr@nih.gov

William Jirles, M.P.H.
Office of Policy, Planning, and Evaluation
National Institute of Environmental Health Sciences
National Institutes of Health
Building 101, Room B224
111 Alexander Drive, MS B2-08
Research Triangle Park, NC 27709
(919) 541-2637/Fax (919) 541-4737
E-mail: jirles@niehs.nih.gov

Carol Johnson, M.P.H.
Air Pollution and Respiratory Health Branch
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E17
Atlanta, GA 30333
(404) 639-2556/Fax (404) 639-2560
E-mail: cxj3@cdc.gov

Marshall Plaut, M.D.
Chief
Allergic Mechanisms Section
Division of Allergy, Immunology, and Transplantation
National Institute of Allergy and Infectious Diseases
National Institutes of Health
6700-B Rockledge Drive, Room 5146
Bethesda, MD 20892-7640
(301) 496-8973/Fax (301) 402-2571
E-mail: mp27s@nih.gov

Stephen Redd, M.D.
Chief
Air Pollution and Respiratory Health Branch
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E17
Atlanta, GA 30341
(404) 639-2549/Fax (404) 639-2560
E-mail: scr1@cdc.gov

Daniel Rotrosen, M.D.
Director
Division of Allergy, Immunology, and Transplantation
National Institute of Allergy and Infectious Diseases
National Institutes of Health
6700-B Rockledge Drive, Room 5142
Bethesda, MD 20892-7640
(301) 496-1886/Fax (301) 402-2571
E-mail: drl7@nih.gov

25. Sexually Transmitted Diseases

Dana M. Shelton
Assistant Director for Policy, Planning, and External Relations
Division of STD Prevention
National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., MS E02
Atlanta, GA 30333
(404) 639-8260/Fax (404) 639-8608
E-mail: dzs8@cdc.gov

26. Substance Abuse

Wendy Davis
Special Assistant to the Director
Office of Policy and Planning
Center for Substance Abuse Prevention
Substance Abuse and Mental Health Services Administration
Rockwall II Building, Room 950
5600 Fishers Lane
Rockville, MD 20857
(301) 443-9913/Fax (301) 443-6394
E-mail: wdavis@samhsa.gov

Susan Farrell, Ph.D.
Acting Deputy Director
Division of Biometry and Epidemiology
National Institute on Alcohol Abuse and Alcoholism
National Institutes of Health
Willco Building, Room 514
6000 Executive Boulevard
Bethesda, MD 20892-7005
(301) 443-1274/Fax (301) 443-7043
E-mail: sf128t@nih.gov

Table I. Healthy People 2010 Lead Agencies and Work Group Coordinators—Con.

James D. Colliver, Ph.D.
Epidemiology Research Branch, DESPR
National Institute on Drug Abuse
National Institutes of Health
Suite 5153 MSC 9589
6001 Executive Boulevard
Bethesda, MD 20892-9589
(301) 402-1846/Fax (301) 443-2636
E-mail: jcollive@mail.nih.gov

Ann Mahony, M.P.H.
Senior Program Management Officer
Office of Policy, Coordination, and Planning
Center for Substance Abuse Treatment
Substance Abuse and Mental Health
Services Administration
Rockwall II Building, Room 619
5600 Fishers Lane
Rockville, MD 20857
(301) 443-7924/Fax (301) 480-6077
E-mail: amahony@samhsa.gov

27. Tobacco Use

Karil Bialostosky, M.S.
Senior Health Policy Analyst
Office on Smoking and Health
Centers for Disease Control and Prevention
200 Independence Ave, S.W., Room 317-B
Washington, DC 20201
(202) 205-9231/Fax (202) 205-8313
E-mail: kfb3@cdc.gov

28. Vision and Hearing

Marin P. Allen, Ph.D.
Chief
Office of Health Communication
and Public Liaison
National Institute on Deafness
and Other Communication Disorders
National Institutes of Health
Building 31, Room 3C35
31 Center Drive, MSC 2320
Bethesda, MD 20892-2320
(301) 496-7243 or 402-0252/Fax (301) 402-0018
Email: ma51v@nih.gov

Judith Cooper, Ph.D.
Chief, Scientific Programs Branch
National Institute on Deafness and Other
Communication Disorders
National Institutes of Health
EPS400C, MSC 7180
6120 Executive Boulevard
Bethesda, MD 20892-7180
(301) 496-5061/Fax (301) 402-6251
E-mail: judith_cooper@nih.gov

Michael Davis
Associate Director for Science Policy and Legislation
National Eye Institute
National Institutes of Health
Building 31, Room 6A23
9000 Rockville Pike
Bethesda, MD 20892-2510
(301) 496-4308/Fax (301) 402-3799
E-mail: mpd@nei.nih.gov

Rosemary Janiszewski, M.S., CHES.
Chief
Scientific Programs Branch
National Eye Institute
National Institutes of Health
Building 31, Room 6A32
9000 Rockville Pike
Bethesda, MD 20892-2510
(301) 496-5248/Fax (301) 402-1065
E-mail: rjaniszewski@nei.nih.gov

Adolescent Health

Trina Anglin, M.D., Ph.D.
Chief, Office of Adolescent Health
Maternal and Child Health Bureau
Health Resources and Services Administration
Parklawn Building, Room 18A-39
5600 Fishers Lane
Rockville, MD 20857
(301) 443-4291/Fax (301) 443-1296
Email: tanglin@hrsa.gov

Casey Hannan, M.P.H.
Health Education Specialist
Division of Adolescent and School Health
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K29
Atlanta, GA 30341-3724
(770) 488-3190/Fax (770) 488-3110
Email: clh8@cdc.gov

Lloyd J. Kolbe, Ph.D.
Director, Division of Adolescent and School Health
National Center for Chronic Disease
Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E., MS K29
Atlanta, GA 30341-3724
(770) 488-3254/Fax (770) 488-3110
Email: ljk3@cdc.gov

Women's Health

Theresa Brown
Staff Assistant
DHHS Office on Women's Health
200 Independence Avenue, S.W., Room 728F
Washington, DC 20201
(202) 690-7650/Fax (202) 260-6537
Email: tbrown@osophs.dhhs.gov

Miryam Granthon
Healthy People Consortium Coordinator
Office of Disease Prevention and Health Promotion
200 Independence Avenue, S.W., Room 738G
Washington, DC 20201
(202) 690-6245/Fax (202) 205-9478
Email: mgranthon@osophs.dhhs.gov

Suzanne Haynes, Ph.D.
Assistant Director for Science
DHHS Office on Women's Health
200 Independence Avenue, S.W., Room 728F
Washington, DC 20201
(202) 690-7650/Fax (202) 260-6537
Email: shaynes@osophs.dhhs.gov

Table II. Acronyms used in *Healthy People 2000 Final Review*

Acronyms	*Agency/Organization*
ACS	American Cancer Society
AHA	American Hospital Association
AIRS	Aerometric Information Retrieval System
ALA	American Lung Association
ATSDR	Agency for Toxic Substances and Disease Registry
BHPr	Bureau of Health Professions
BJS	Bureau of Justice Statistics
BLS	Bureau of Labor Statistics
CDC	Centers for Disease Control and Prevention
CFSAN	Center for Food Safety and Applied Nutrition
CPSC	Consumer Product Safety Commission
CSAT	Center for Substance Abuse Treatment
DoD	Department of Defense
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transportation
EPA	Environmental Protection Agency
EPO	Epidemiology Program Office
FARS	Fatality and Analysis Reporting System
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Administration
GAO	Government Accounting Office
HCFA	Health Care Financing Administration
HRSA	Health Resources and Services Administration
IHS	Indian Health Service
IRMO	Information Resources Management Office
NCCAN	National Center for Child Abuse and Neglect
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCEH	National Center for Environmental Health
NCHS	National Center for Health Statistics
NCHSR	National Center for Health Services Research
NCHSTP	National Center for HIV, STD, and TB Prevention
NCI	National Cancer Institute
NCID	National Center for Infectious Disease
NCIPC	National Center for Injury Prevention and Control
NCPS	National Center for Prevention Services
NCVHS	National Committee on Vital and Health Statistics
NHLBI	National Heart, Lung, and Blood Institute
NHTSA	National Highway Traffic Safety Administration
NIAAA	National Institute on Alcoholism and Alcohol Abuse
NICHD	National Institute for Child Health and Human Development
NIDA	National Institute on Drug Abuse
NIDR	National Institute of Dental Research
NIH	National Institutes of Health
NIMH	National Institute for Mental Health
NIOSH	National Institute for Occupational Safety and Health
NIP	National Immunization Program
NSBA	National School Boards Association
OAR	Office of Air and Radiation
OAS	Office of the Assistant Secretary
OASD	Office of the Assistant Secretary of Defense
OASH	Office of the Assistant Secretary for Health
ODPHP	Office of Disease Prevention and Health Promotion
OPA	Office of Population Affairs
OPEL	Office of Planning, Evaluation, and Legislation
OPHS	Office of Public Health and Science
OPPTS	Office of Pollution, Prevention, and Toxic Substance
ORA	Office of Research and Analysis
OSH	Office of the Secretary of Health

Table II. Acronyms used in *Healthy People 2000 Final Review*—Con.

Acronyms	*Agency/Organization*
OSHA	Occupational Safety and Health Administration
OSWER	Office of Solid Waste Enforcement and Remediation
PHF	Public Health Foundation
PHS	Public Health Service
SAMHSA	Substance Abuse and Mental Health Services Administration
USDA	United States Department of Agriculture

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
Priority Area 1: Physical Activity and Fitness		
1.1	2.1, 3.1, 15.1	12-1*
1.2	2.3, 15.10, 17.12	19-2,* 19-3*
1.3	15.11, 17.13	22-6*
1.3	15.11, 17.13	22-2*
1.4		22-3*
1.4		22-7*
1.5		22-1*
1.6		22-4*
1.6		22-5*
1.7	2.7	
1.8		22-9
1.8		
1.9		22-10
1.1		22-13*
1.11		
1.12		1-3a*
1.12		3-10h*
1.13	17.3	
Priority Area 2: Nutrition		
2.1	1.1, 3.1, 15.1	12-1*
2.2	16.1	3-1*
2.3	1.2, 15.10, 17.12	19-2*
2.3	1.2, 15.10, 17.12	19-3a–c*
2.4		19-4
2.5	15.9, 16.7	19-8*
2.5		19-9*
2.6	16.8	19-5*
2.6	16.8	19-6*
2.6	16.8	19-7*
2.7	1.7	
2.8		19-11*
2.9		19-10*
2.10		19-12a–c*
2.10		19-13*
2.11	14.9	16-19a–b
2.11	14.9	16-19c*
2.12	13.11	
2.13		
2.14		
2.15		
2.16		
2.17		19-15*
2.18		
2.19		7-2h*
2.20		19-16*
2.21		19-17*
2.21		1-3b*
2.22	3.18, 15.2	12-7*
2.23	16.5	3-5*
2.24	17.11	5-2*
2.24	17.11	5-3*
2.25	15.7	12-14*
2.26	15.4	12-10*
2.27	15.6	12-13*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
Priority Area 3: Tobacco		
3.1	1.1, 2.1, 15.1	12-1*
3.2	16.2	3-2*
3.3		24-10*
3.4	15.12, 16.6	27-1a*
3.5		27-3*
3.6		27-5*
3.7		27-6*
3.7		27-7
3.8	11.17	27-9
3.9	13.17	27-2a*
3.9	13.17	27-2c*
3.10		27-11
3.11	10.18	27-12*
3.12	10.19	27-13a–e
3.12	10.19	27-13f*
3.13		27-14a–b*
3.14		
3.15		
3.16		1-3c*
3.16		3-10a–c*
3.17	13.7, 16.17	3-6*
3.18	2.22, 15.2	12-7*
3.19	4.5	26-9a
3.19	4.5	26-9b
3.19	4.5	26-10a,c
3.19	4.5	27-4a
3.19	4.5	27-4b*
3.20	4.6	26-10b
3.20	4.6	27-2a*
3.20	4.6	27-2b*
3.21	4.9	26-16a–f*
3.21	4.9	27-17a–b*
3.21	4.9	27-17c
3.22	4.10	26-17a–c
3.23		27-21a–b*
3.24		27-8a–c*
3.25	10.20	27-19*
3.26		
Priority Area 4: Substance Abuse: Alcohol and Other Drugs		
4.1	9.23	26-1a
4.2		26-2*
4.3		26-3*
4.4		26-4*
4.5	3.19	26-9a–b
4.5	3.19	26-10a,c
4.5	3.19	27-4a
4.6	3.20	26-10b
4.6	3.20	27-2b
4.7		26-11a–b
4.7		26-11c–d*
4.8		26-12
4.9	3.21	26-16a–f*
4.9	3.21	27-17a–b*
4.9	3.21	27-17c
4.10	3.22	26-17a–c

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
4.11		26-14a–c*
4.12		
4.13		
4.14		
4.15		26-24
4.16		
4.17		
4.18		26-25
4.19		1-3d*
4.20		
Priority Area 5: Family Planning		
5.1		9-7
5.2		9-1*
5.3		9-12*
5.4	18.3, 19.9	9-8a*
5.4	18.3, 19.9	9-8b*
5.4	18.3, 19.9	9-9a*
5.4	18.3, 19.9	9-9b*
5.5	18.15, 19.16	25-11*
5.6		9-10a–d, g–h
5.6		25-11*
5.7		9-4
5.8		9-11a–c*
5.9		
5.10	14.12	1-3f*
5.11	18.13, 19.11	
5.12		9-3
Priority Area 6: Mental Health and Mental Disorders		
6.1	7.2	18-1*
6.2	7.8	18-2
6.3		
6.4		
6.5		
6.6		
6.7		18-9b*
6.8		
6.9		
6.10	7.18	
6.11		20-9
6.12		
6.13		
6.14		
6.15		
Priority Area 7: Violent and Abusive Behavior		
7.1		15-32*
7.2	6.1	18-1*
7.3		15-3*
7.4		15-33a–b*
7.5		15-34*
7.6		15-37*
7.7		15-35*
7.8	6.2	18-2
7.9		15-38*
7.10		15-39*
7.11		15-4*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
7.12		
7.13		
7.14		
7.15		
7.16		
7.17		
7.18	6.10	
7.19	9.25	
Priority Area 8: Educational and Community-Based Programs		
8.1	17.1, 21.1	
8.2		7-1
8.3		
8.4		7-2a–j*
8.5		7-3
8.6		7-5a–f*
8.7		7-6*
8.8		7-12
8.9		
8.10		7-10*
8.11		7-11a–b, d–f, j–l, p–q, z, bb*
8.11		7-11c, g–i, m–o, r, t–v, y, aa
8.12		7-7*
8.12		7-9*
8.13		
8.14		
Priority Area 9: Unintentional Injuries		
9.1		15-13*
9.2		15-14*
9.3		15-15a*
9.3		15-15b
9.3f		15–16
9.4		15-27*
9.5		15-29*
9.6		15-25*
9.7		15-28a–b*
9.8		15-7*
9.9		15-1*
9.10		15-2*
9.11		
9.12		15-19
9.12		15-20
9.13		15-21
9.13		15-23
9.14		
9.15		
9.16		
9.17		15-26a–b*
9.18		
9.19	13.16	15-31*
9.20		
9.21		1-3e*
9.22		
9.23	4.1	26-1a
9.24		15-24
9.25	7.19	
9.26		15-22

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
Priority Area 10: Occupational Safety and Health		
10.1		20-1a
10.1a		20-1b
10.1b		20-1c
10.1c		20-1d
10.1d		20-1e
10.2		20-2a
10.2		20-2g*
10.2a		20-2b
10.2b		20-2c
10.2c		20-2d
10.2d		20-2e
10.2		20-2f
10.2f		20-2h
10.3		20-3
10.4		20-8
10.5	20.3e	14-3g
10.6		
10.7		20-11*
10.8		20-7*
10.9	20.11	14-28c*
10.10		
10.11		
10.12		
10.13		
10.14		
10.15		
10.16		20-5
10.17		20-4
10.18	3.11	27-12*
10.19	3.12	27-13b*
10.20	3.25	27-19*
Priority Area 11: Environmental Health		
11.10		24-2a–c*
11.1b		1.9a
11.2	17.8	
11.3		8-6
11.4		8-11*
11.5		8-1a–g*
11.6		8-18*
11.7		8-4*
11.8		8-15*
11.9		8-5*
11.10		8-8*
11.11		8-22*
11.12		8-19*
11.13		
11.14		8-12a*
11.15		
11.16		8-27a–j
11.17	3.8	27-9
Priority Area 12: Food and Drug Safety		
12.1		10-1a–d
12.2		10-2a*
12.2		10-2b
12.3		10-5*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
12.4		
12.5		
12.6		17-3*
12.7		
12.8		17-4*
12.8		17-5a*
12.8		17-5b*
Priority Area 13: Oral Health		
13.1		21-1a*
13.1		21-1b
13.1		21-1c
13.2		21-2a,d*
13.2		21-2b-c
13.3		21-3
13.4		21-4*
13.5		21-5a*
13.6		21-5b*
13.7	3.17, 16.17	3-6*
13.8		21-8a
13.8		21-8b*
13.9		21-9
13.10		
13.11	2.12	
13.12		
13.13		
13.14		21-10*
13.15		21-15*
13.16	9.19	15-31
13.17	3.9	27-2c*
Priority Area 14: Maternal and Infant Health		
14.1		16-1c
14.1d		16-1d
14.1g		16-1
14.2		16-1a
14.3		16-4
14.4		16-18*
14.5		16-10a
14.5		16-10b
14.6		16-12*
14.7		16-5a*
14.8a		16-9a*
14.8b		16-9b*
14.9	2.11	16-19a–b
14.9	2.11	16-19c*
14.10		16-17a–b, d*
14.10		16-17c
14.11		16-6a
14.12	5.1	1-3f*
14.13		
14.14		16-8*
14.15		16-20a–c*
14.16		
14.17		16-15*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
Priority Area 15: Heart Disease and Stroke		
15.1	1.1, 2.1, 3.1	12-1*
15.2	2.22, 3.18	12-7*
15.3		
15.4	2.26	12-10*
15.5		12-11*
15.6	2.27	12-13
15.7	2.25	12-14
15.8		
15.9	2.5, 16.7	19.8
15.1	1.2, 2.3, 17.12	19-2, 19-3*
15.11	1.3, 17.13	22-6*
15.12	3.4, 16.6	
15.13		12-12*
15.14		12-15*
15.15		
15.16		7-5b
15.17		
Priority Area 16: Cancer		
16.1	2.2	3-1*
16.2	3.2	3-2*
16.3		3-3*
16.4		3-4*
16.5	2.23	3-5*
16.6	3.4, 15.12	
16.7	2.5, 15.9	19-8
16.8	2.6	19-5
16.8	2.6	19-6
16.8	2.6	19-7
16.9		3-9b*
16.10		3-10a–h*
16.11		3-13*
16.12		3-11a*
16.12		3-11b*
16.13		3-12a*
16.13		3-12b*
16.14		21-7*
16.15		
16.16		
16.17	3.17, 13.7	3-6*
Priority Area 17: Diabetes and Chronic Disabling Conditions		
17.1	8.1, 21.1	
17.2		
17.3	1.13	
17.4		24-4*
17.5		
17.6		
17.7		28-4*
17.8	11.2	
17.9		5-5*
17.10		4-7*
17.10		5-10*
17.10		28-5
17.11	2.24	5-2*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
17.11	2.24	5-3*
17.12	1.2, 2.3, 15.10	19-2, 19-3*
17.13	1.3, 15.11	22-6
17.14		5-1*
17.14		24-6*
17.15		
17.16		
17.17		
17.18		1-3h*
17.19		
17.20		16-23*
17.21		14-17*
17.22	22.4	
17.23		5-13*
Priority Area 18: HIV Infection		
18.1		
18.2		13-1
18.2		13-4*
18.2		13-5*
18.2a		13-2
18.2b		13-3
18.3	5.4, 19.9	9-8a*
18.3	5.4, 19.9	9-8b*
18.3	5.4, 19.9	9-9a*
18.3	5.4, 19.9	9-9b*
18.4	19.10	13-6*
18.4	19.10	25-11*
18.4a	19.10a	9-10e*
18.4b	19.10b	9-10f*
18.5		
18.6		
18.7		
18.8		13-7*
18.9	19.14	1-3g
18.10	19.12	7-2g*
18.11	19.17	7-3*
18.12		
18.13	5.11, 19.11	25-18*
18.14		
18.15	5.5, 19.16	25-11*
18.16		
18.17		
Priority Area 19: Sexually Transmitted Diseases		
19.1		25-2
19.2		25-1a–c*
19.3		25-3
19.4		25-9
19.5		25-4*
19.5		25-5*
19.6		25-6*
19.7	20.3b–c	14-3e–f
19.8		
19.9	5.4, 18.3	9-8a*
19.9	5.4, 18.3	9-8b*
19.9	5.4, 18.3	9-9a*
19.9	5.4, 18.3	9-9b*

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
19.10	18.4	13-6
19.10a	18.4a	9-10e*
19.10b	18.4b	9-10f*
19.11	5.11, 18.13	
19.12	18.10	7-2g*
19.13		25-18*
19.14	18.9	1-3g*
19.15		25-15*
19.15		25-19*
19.16	5.5, 18.15	25-11*
19.17	18.11	7-3*
Priority Area 20: Immunization and Infectious Diseases		
20.1		14-1a, e–f, h–i
20.1		14-1b–d, g, j*
20.2		
20.3	10.5	14-3a–c*
20.3	10.5	14-6*
20.3	10.5	14-9
20.3a		14-3d
20.3b	19.7	14-3e
20.3c	19.7	14-3f
20.3	10.5	14-3g
20.3f		14-2
20.4		14-11
20.5		14-20a–e*
20.5		14-21*
20.6		14-15*
20.7		14-4*
20.7		14-7*
20.8		
20.9		14-18*
20.10		14-5a–d*
20.11		14-22a–e*
20.11		14-23a–c,f–h
20.11		14-24a*
20.11		14-27a–d*
20.11		14-28b
20.11	10.9	14-28c
20.11		14-29a–f*
20.12		
20.13		
20.14		
20.15		
20.16		
20.17		
20.18		14-13*
20.19		

Table III. Crosswalk between objectives from *Healthy People 2000* to *Healthy People 2010*—Con.

Healthy People 2000		*Healthy People 2010*
Objective number	*Duplicate objective number(s)*	*Objective number*
Priority Area 21: Clinical Preventive Services		
21.1	8.1, 17.1	
21.2	20.11	†
21.3		1-4a*
21.3		1-4b*
21.3		1-4c
21.4		1-1*
21.4		1-2*
21.5		
21.6		
21.7		
21.8		1-8a–d
21.8		1-8i–t*
21.8a		1-8e–h*
Priority Area 22: Surveillance and Data Systems		
22.1		
22.2		
22.3		
22.4	17.22	
22.5		
22.6		
22.7		23-7*

* *Healthy People 2010* objective is modified from the comparable *Healthy People 2000 objective; see Tracking Healthy People 2010*, Part B: Operational Definitions for a description of changes.

†This is a compound *Healthy People 2000* objective with several measures. In *Healthy People 2010*, these measures were separated and reassigned to appropriate focus areas. See chapter 21, section "Transition to *Healthy People 2010*" for more information.

Table IV. Mortality objective cause-of-death categories

Objective number	Healthy People 2000		Mortality tabulation lists	
	Cause of death[1]	*ICD-9 identifying codes*	*Cause of death*	*ICD-9 identifying codes*
1.1	Coronary heart disease	402, 410-414, 429.2	Diseases of heart	390-398, 402, 404-429
2.1	See 1.1			
2.2	Cancer (all sites)	140-208	Malignant neoplasms, including neoplasms of lymphatic hematopoietic tissues	(Same as HP2000)
2.22	Stroke	430-438	Cerebrovascular diseases	(Same as HP2000)
2.23	Colorectal cancer	153.0-154.3, 154.8, 159.0	Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus	153, 154
3.1	See 1.1			
3.2	Lung cancer	162.2-162.9	Malignant neoplasms of trachea, bronchus, and lung	162
3.3	Chronic obstructive pulmonary disease	490-496	Chronic obstructive pulmonary diseases and allied conditions	(Same as HP2000)
3.17	Cancer of the oral cavity and pharynx	140-149	Malignant neoplasms of lip, oral cavity, and pharynx	(Same as HP2000)
3.18	See 2.22			
4.1	Alcohol-related motor vehicle crashes	E810-E819[2]	No comparable category	. . .
4.2	Cirrhosis	571	Chronic liver disease and cirrhosis	(Same as HP2000)
4.3	Drug-related deaths	292, 304, 305.2-305.9, E850-E858, E950.0–E950.5, E962.0, E980.0–E980.5	Drug-induced causes	(Same as HP2000)
6.1	Suicides	E950–E959	(Same as HP2000)	(Same as HP2000)
7.1	Homicides	E960–E969	Homicide and legal intervention	E960-E978
7.2	See 6.1			
7.3	Firearm-related deaths	E922.0–E922.3, E922.8–E922.9, E955.0-E955.4, E965.0–E965.4, E970, E985.0–E985.4	Injury by firearms	(Same as HP2000)
9.1	Unintentional injuries	E800–E949	Accidents and adverse effects	(Same as HP2000)
9.3, 9.3a–c, e–f	Motor vehicle crashes	E810–E819	Motor vehicle traffic accidents	(Same as HP2000)
9.3d,g	Motor vehicle crashes	E810–E825	Motor vehicle accidents	(Same as HP2000)
9.4	Falls and fall-related injuries	E880–E888	Accidental falls	(Same as HP2000)
9.5	Drowning	E830, E832, E910	Accidental drowning and submersion	E910
9.6	Residential fires	E890–E899	Accidents caused by fire and flames	(Same as HP2000)
9.23	See 4.1			
10.1	Work-related injuries[3]	E800–E999	No comparable category	. . .
10.16	Work-related homicides	E960–E969	No comparable category	. . .
10.17	Occupational lung diseases[3]	500–505	No comparable category	. . .
13.7	See 3.17			
14.3	Maternal mortality	630–676	Complications of pregnancy, childbirth, and the puerperium or maternal mortality	(Same as HP2000)

See footnotes and key at end of table.

Table IV. Mortality objective cause-of-death categories—Con.

Objective number	*Healthy People 2000*		*Mortality tabulation lists*	
	Cause of death[1]	*ICD–9 identifying codes*	*Cause of death*	*ICD–9 identifying codes*
15.1	See 1.1			
15.2	See 2.22			
16.1	See 2.2			
16.2	See 3.2			
16.3	Breast cancer in women	174	Malignant neoplasm of female breast	(Same as HP2000)
16.4	Cancer of the uterine cervix	180	Malignant neoplasm of cervix uteri	(Same as HP2000)
16.5	See 2.23			
16.17	See 3.17			
17.9	Diabetes-related deaths[3]	250	Diabetes mellitus	(Same as HP2000)
20.2	Epidemic-related pneumonia and influenza deaths for ages 65 years and over	480–487	No comparable category	. . .

. . . Category not applicable.

[1] Unless otherwise specified, *Healthy People 2000* uses underlying cause-of-death data.

[2] Includes only those deaths assigned to E810–E819 that were alcohol related; see Priority Area 4, Substance Abuse: Alcohol and Other Drugs.

[3] *Healthy People 2000* uses multiple cause-of-death data.

Table V. Morbidity codes used for objectives tracked by the National Hospital Discharge Survey[1]

Objective number	*Subject*	*ICD-9-CM diagnosis codes*	*Comment*
9.2	All nonfatal injuries	800–959	Because of limited reporting of external causes (E-codes) in hospital discharge systems, the data include injuries that are unintentional, intentional, and where the intent is unknown.
9.7	Hip fractures	820	
9.9	Nonfatal head injuries	800–801, 803–804, 850–854, 870–873, 925	
9.10	Nonfatal spinal cord injuries	806, 952	
11.1	Asthma	493	
14.7	Severe complications of pregnancy	630–634, 636–677	First listed code cannot equal V27 (which would indicate a delivery)
14.8	Cesarean births — total	V27	Procedure code 74, excluding 74.3 and 74.91
14.8a	Cesarean births — primary	V27 first listed and 654.2 not listed	Procedure code 74, excluding 74.3 and 74.91
14.8b	Cesarean births — repeat	V27 first listed and 654.2 (any listed)	Procedure code 74, excluding 74.3 and 74.91
17.10	Lower extremity amputation among people with diabetes	250 (any listed) and 895–897 are not listed	Procedure codes 84.11–84.12
19.16	Pelvic inflammatory disease	614.0–614.5, 614.7–614.9, 615.0, 615.1, 615.9, 98.10 098.16, 098.17, 098.30, 098.36–098.37, 098.39, 098.86 (any listed)	

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[1] First listed diagnoses are used for all objectives, unless otherwise stated. Because of the hierarchical nature of ICD–9–CM coding, three digit codes (such as 493) include all the more detailed four- and five-digit codes with the same first three digits (for example, 493 includes 493.0-493.9).

Table VI. Published issues of *Healthy People Statistical Notes*

Number	Title	Date of Issue
	Healthy People 2000	
1	Health Status Indicators for the Year 2000	Fall 1991
2	Infant Mortality	Winter 1991
3	Health Status Indicators: Definitions and National Data	Spring 1992
4	Issues Related to Monitoring the Year 2000 Objectives	Summer 1993
5	Revisions to *Healthy People 2000* Baselines	July 1993
6	Direct Standardization (Age-Adjusted Death Rates)	March 1995
7	Years of Healthy Life	April 1995
8	Evaluating Public Health Data Systems: A Practical Approach	June 1995
9	Monitoring Air Quality in *Healthy People 2000*	September 1995
10	Health Status Indicators: Differentials by Race and Hispanic Origin	September 1995
11	Operational Definitions for Year 2000 Objectives: Priority Area 20, Immunization and Infectious Diseases	February 1997
12	Operational Definitions for Year 2000 Objectives: Priority Area 13, Oral Health	May 1997
13	*Healthy People 2000 Midcourse Revisions*: A Compendium	August 1997
14	Operational Definitions for Year 2000 Objectives: Priority Area 14, Maternal and Infant Health	December 1997
15	Priority Data Needs: Sources of National, State, and Local-level Data and Data Collection Systems	December 1997
16	Operational Definitions for Year 2000 Objectives: Priority Area 6, Mental Health and Mental Disorders	February 1998
17	Operational Definitions for Year 2000 Objectives: Priority Area 21, Clinical Preventive Services	December 1998
18	Operational Definitions for Year 2000 Objectives: Priority Area 1, Physical Activity and Fitness	December 1998
19	*Healthy People 2000*: An Assessment Based on the Health Status Indicators for the United States and Each State	November 2000
	Healthy People 2010	
20	Age Adjustment Using the 2000 Projected U.S. Population	January 2001

Table VII. Special population objectives included in *Healthy People 2000*

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		American Indian/Alaska Native		
1.2d	2.3d, 15.10d, 17.12d	Overweight prevalence: 20 years and over	Narrowing	Toward
1.5f		Sedentary lifestyle: 18 years and over	Narrowing	Toward
2.10d		Anemia prevalence: Children 1-5 years	Not applicable	Away
2.11d	14.9d	Breastfeeding: During early postpartum period	Narrowing	Toward
2.11d	14.9d	Breastfeeding: At age 6 months	Widening	Away
2.12b	13.11b	Baby bottle tooth decay	Cannot assess	Cannot assess
2.24a	17.11a	Diabetes prevalence: 15 years and over	Narrowing	Away
3.4f	15.12f, 16.6f	Cigarette smoking prevalence: 18 years and over	Narrowing	Toward
3.9a	13.17a	Smokeless tobacco use: 18-24 years	Cannot assess	Cannot assess
4.1a	9.23a	Alcohol-related motor vehicle deaths: Male	Widening	Met
4.2b		Cirrhosis deaths	Widening	Away
6.1d	7.2d	Suicide: Male	Widening	Away
7.1f		Homicide	Widening	Toward
8.11		Counties with programs for racial/ethnic minority groups	Not applicable	Cannot assess
9.1a		Unintentional injury deaths	Narrowing	Toward
9.3d		Motor vehicle crash deaths	Widening	Met
9.4d		Fall-related deaths	Widening	Away
9.5d		Drowning deaths	Narrowing	Toward
9.6f		Residential fire deaths	Widening	Toward
13.1b		Dental caries: Children 6-8 years	Widening	Away
13.1d		Dental caries: Adolescents 15 years	Widening	Toward
13.2b		Untreated dental caries: Children 6-8 years	Widening	Away
13.2f		Untreated dental caries: Adolescents 15 years	Narrowing	Toward
13.4b		Complete tooth loss: 65 years and over	Eliminate	Toward
13.5b		Gingivitis: 35-44 years	Narrowing	Away
14.1b		Infant mortality	Narrowing	Toward
14.1i		Postneonatal mortality	Narrowing	Toward
14.4a		Fetal alcohol syndrome	Narrowing	Away
14.11b		Prenatal care in the first trimester	Narrowing	Toward
15.14c		Blood cholesterol checked: Ever, 18 years and over	Widening	Toward
15.14e		Blood cholesterol checked: Past 2 years, 18 years and over	Narrowing	Toward
17.2b		Limitation in major activity due to chronic conditions	Widening	Away
17.9b		Diabetes-related deaths	Widening	Away
17.10b		End-stage renal disease due to diabetes	Widening	Away
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
20.3g		Hepatitis B cases	Cannot assess	Met
20.3j		Hepatitis A cases	Narrowing	Met
20.4d		Tuberculosis new cases	Narrowing	Toward
20.7a		Bacterial meningitis cases	Narrowing	Met
21.2		Receipt of recommended services: Cholesterol ever checked, adults 18 years and over	Narrowing	Toward
21.2		Receipt of recommended services: Cholesterol checked in last 2 years, adults 18 years and over	Widening	Toward
21.2		Receipt of recommended services: Pap test in last 3 years, women 18 years and over	Narrowing	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, women 50 years and over	Narrowing	Toward
21.3d		Usual source of care: 18 years and over	Narrowing	Toward
21.4a		People without health care coverage: Under 65 years	Narrowing	Away

Table VII. Special population objectives included in *Healthy People 2000—Con.*

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		American Indian/Alaska Native—Con.		
21.8		Racial/ethnic minority representation in the health professions: Degrees awarded	Not applicable	Met
21.8a		Racial/ethnic minority representation in the health professions: Enrolled in schools of nursing	No change	No change
22.5a		Periodic analysis and publication of data for racial and ethnic group	Narrowing	Met

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: American Indian/Alaska Native

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	3	0	2	1	6	1	7
Toward	1	16	0	5	0	22	2	24
Mixed/No change	0	0	1	0	0	1	0	1
Away	0	4	0	9	0	13	1	14
Cannot assess	0	0	0	0	2	2	1	3
TOTAL	1	23	1	16	3	44	5	49

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Asian/Pacific Islander		
2.4d		Growth retardation: Low-income children 1 year	Cannot assess	Met
2.4e		Growth retardation: Low-income children 2-4 years	Cannot assess	Met
3.4g	15.12g, 16.6g	Cigarette smoking prevalence: Male 18 years and over	Narrowing	Toward
8.11		Counties with programs for racial/ethnic minority groups	Not applicable	Cannot assess
15.14f		Blood cholesterol checked: Past 2 years, 18 years and over	Narrowing	Toward
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
20.3d		Hepatitis B cases: Children	Cannot assess	Toward
20.4a		Tuberculosis new cases	Widening	Toward
21.2		Receipt of recommended services, adults 18 years and over: Cholesterol checked in last 2 years	Narrowing	Toward
21.2		Receipt of recommended services, adults 18 years and over: Tetanus booster in last 2 years	Narrowing	Toward
21.2		Receipt of recommended services, adults 65 years and over: Pneumococcal vaccine in lifetime	Narrowing	Toward
21.2		Receipt of recommended services, adults 65 years and over: Influenza vaccine in last 12 months	Eliminate	Met
21.2		Receipt of recommended services, women 18 years and over: Pap test in last 3 years	Narrowing	Toward
21.2		Receipt of recommended services, women 50 years and over: Breast exam and mammogram in past 2 years	Narrowing	Toward
21.2		Receipt of recommended services, adults 18 years and over: Asked at least one screening question at routine checkup	Narrowing	Toward
21.3e		Usual source of care: 18 years and over	Narrowing	Toward
21.8a		Racial/ethnic minority representation in the health professions: Enrolled in schools of nursing	Narrowing	Toward
22.5a		Periodic analysis and publication of data for racial and ethnic groups	Narrowing	Met

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Asian/Pacific Islander

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	1	1	0	0	2	4	0	4
Toward	0	10	0	1	1	12	2	14
Mixed/No change	0	0	0	0	0	0	0	0
Away	0	0	0	0	0	0	0	0
Cannot assess	0	0	0	0	0	0	1	1
TOTAL	1	11	0	1	3	16	3	19

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Black or African American		
1.1a	2.1a, 3.1a, 15.1a	Coronary heart disease deaths	Widening	Toward
1.2b	2.3b, 15.10b, 17.12b	Overweight prevalence: Female	Narrowing	Away
1.4b		Vigorous physical activity: 18 years and over	Not applicable	Away
1.5d		Sedentary lifestyle: 18 years and over	Widening	Away
1.13b	17.3b	Difficulty performing self-care activities: 70 years and over	Widening	Away
2.2a	16.1a	Cancer deaths	Narrowing	Met
2.4a		Growth retardation: Low-income children under 1 year	Cannot assess	No change
2.10e		Anemia prevalence: Low-income pregnant female	Not applicable	Away
2.11b	14.9b	Breastfeeding: During early postpartum period	Narrowing	Toward
2.11b	14.9b	Breastfeeding: At age 6 months	Narrowing	Toward
2.12c	13.11c	Baby bottle tooth decay	Narrowing	Toward
2.22a	3.18a, 15.2a	Stroke deaths	Narrowing	Toward
2.23a	16.5a	Colorectal cancer deaths	Widening	Toward
2.24e	17.11	Diabetes prevalence	Widening	Away
3.2b	16.2b	Slow the rise in lung cancer deaths: Male	Narrowing	Met
3.4d	15.12d, 16.6d	Cigarette smoking prevalence: 18 years and over	Narrowing	Toward
3.17a	13.7a, 16.17a	Oral cancer deaths: Male 45–74 years	Narrowing	Met
3.17b	13.7b, 16.17b	Oral cancer deaths: Female 45–74 years	Narrowing	Met
4.2a		Cirrhosis deaths: Male	Narrowing	Toward
4.3a		Drug-related deaths	Narrowing	Away
5.1a		Adolescent pregnancy: 15–19 years	Narrowing	Toward
5.2a		Unintended pregnancy: 15–44 years	Widening	Toward
5.3a		Infertility: Married couples with wives 15–44 years	Narrowing	Toward
5.4a	18.3a,19.9a	Adolescents who ever engaged in sexual intercourse: Male 15 years	Widening	Toward
5.4b	18.3b,19.9b	Adolescents who ever engaged in sexual intercourse: Male 17 years	Widening	Toward
5.4c	18.3c, 19.9c	Adolescents who ever engaged in sexual intercourse: Female 15–17 years	Eliminate	Toward
5.7a		Failure of contraceptive method: Female 15–44 years	Widening	Away
5.12a		Contraception use: Female 15–44 years	Narrowing	Toward
7.1c		Homicide: Male 15–34 years	Widening	Toward
7.1e		Homicide: Female 15–34 years	Narrowing	Met
7.3a		Firearm related deaths	Narrowing	Met
7.9a		Physical fighting: Adolescent male 14–17 years	Narrowing	Met
7.10a		Weapon-carrying: Adolescent 14–17 years	Narrowing	Met
8.1a	17.1a, 21.1a	Years of healthy life	Narrowing	Toward
8.2b		Completion of high school: 18–24 years	Widening	Away
8.11		Counties with programs for racial/ethnic minority groups	Not applicable	Cannot assess
9.1b		Unintentional injury deaths: Male	Narrowing	Toward
9.2a		Unintentional injury hospitalizations: Male	Narrowing	Met
9.4c		Fall-related deaths: Male 30–69 years	Narrowing	Met
9.5c		Drowning deaths: Male	Narrowing	Toward
9.6c		Residential fire deaths: Male	Narrowing	Met
9.6d		Residential fire deaths: Female	Narrowing	Met
11.1a		Asthma hospitalizations	Widening	Toward
11.4a		Blood lead levels: Inner-city low-income children 6 months to 5 years, Levels exceeding 15 ug/dL	Widening	Toward
11.4a		Blood lead levels: Inner-city low-income children 6 months to 5 years, Levels exceeding 25 ug/dL	Widening	Toward
13.1c		Dental caries: Children 6–8 years	Eliminate	Toward
13.2c		Untreated dental caries: Children 6–8 years	Narrowing	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Black or African American—Con.		
13.2g		Untreated dental caries: Adolescents 15 years	Narrowing	Toward
13.8a		Protective sealants: Children 8 years	Narrowing	Toward
13.8b		Protective sealants: Adolescents 14 years	Widening	Toward
13.12a		Visited the dentist in the past year: Children 5 years	Narrowing	Toward
13.14c		Regular dental visits: 35 years and over	Narrowing	Toward
14.1a		Infant mortality	Widening	Toward
14.1e		Neonatal mortality	Widening	Toward
14.1h		Postneonatal mortality	Widening	Toward
14.2a		Fetal deaths	Widening	Toward
14.3a		Maternal mortality	Widening	Away
14.4b		Fetal alcohol syndrome	Widening	Away
14.5a		Lowbirth weight	Narrowing	No change
14.5b		Very low birthweight	Narrowing	Away
14.7a		Severe complications of pregnancy	Widening	Toward
14.11a		Prenatal care in the first trimester	Narrowing	Toward
14.15		Newborn screening: Sickle cell anemia	Not applicable	Toward
15.3a		End-stage renal disease	Narrowing	Away
15.5b		Taking action to control blood pressure: Hypertensive male 18–34 years	Widening	Toward
15.14a		Blood cholesterol checked: ever, 18 years and over	Widening	Toward
16.3a		Female breast cancer deaths	Widening	Toward
16.4a		Cervical cancer deaths	Narrowing	Toward
16.11e		Breast exam and mammogram within past 2 years: 50 years and over	Narrowing	Met
17.2c		Limitation in major activity due to chronic conditions	Widening	Away
17.4a		People with asthma with activity limitation due to asthma	Narrowing	Toward
17.9a		Diabetes-related deaths	Widening	Away
17.10a		End-stage renal disease due to diabetes	Widening	Away
17.10c		People with diabetes: Lower extremity amputations	Widening	Away
17.14c		Patient education for people 18 years and over with diabetes	Not applicable	Toward
17.16a		Early detection of significant hearing impairment in children	Cannot assess	Cannot assess
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
18.1b		Acquired immunodeficiency syndrome (AIDS) incidence: 18 years and over	Widening	Met
18.4d	19.10d	Condom use at last sexual intercourse: Female 15–44 years	Narrowing	Toward
19.1a		Gonorrhea	Narrowing	Toward
19.3a		Primary and secondary syphilis	Narrowing	Met
19.4a		Congenital syphilis: Infants under 1 year	Narrowing	Met
19.6a		Pelvic inflammatory disease hospitalizations: 15–44 years	Narrowing	Toward
19.8a		Repeat gonorrhea infection	Widening	Toward
20.3h		Hepatitis B cases	Not applicable	Met
20.4b		Tuberculosis new cases	Narrowing	Toward
20.11a		Pneumococcal immunizations: Noninstitutionalized people 65 years and over	Narrowing	Toward
20.11a		Influenza immunizations: Noninstitutionalized people 65 years and over	Narrowing	Toward
21.2		Receipt of recommended services: Cholesterol ever checked, adults 18 years and over	Narrowing	Toward
21.2		Receipt of recommended services: Pneumococcal vaccine in lifetime, adults 65 years and over	Widening	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Black or African American—Con.		
21.2		Receipt of recommended services: Influenza vaccine in last 12 months, adults 65 years and over	Narrowing	Toward
21.3b		Usual source of care: 18 years and over	Narrowing	Toward
21.4c		People without health care coverage: Under 65 years	Narrowing	Toward
21.8		Racial/ethnic minority representation in the health professions: Degrees awarded	Narrowing	Toward
21.8a		Racial/ethnic minority representation in the health professions: Enrolled in schools of nursing	Narrowing	Toward
22.5a		Periodic analysis and publication of data for racial and ethnic groups	Narrowing	Met

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Black or African American

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	16	0	1	0	17	1	18
Toward	2	32	0	20	0	54	4	58
Mixed/No change	0	1	0	0	1	2	0	2
Away	0	4	0	11	0	15	2	17
Cannot assess	0	0	0	0	1	1	1	2
TOTAL	2	53	0	32	2	89	7	97

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Hispanic or Latino		
1.2c	2.3c, 15.10c, 17.12c	Overweight prevalence: Mexican American female	Narrowing	Away
1.2h	2.3h, 15.10h, 17.12h	Overweight prevalence: Mexican American male	Narrowing	Away
1.3a	15.11a, 17.13a	Light to moderate physical activity, 5 or more times per week: 18 years and over	Narrowing	Met
1.4c		Vigorous physical activity: 18 years and over	Widening	Away
1.5e		Sedentary lifestyle: 18 years and over	Widening	Away
1.7a	2.7a	Sound weight loss practices: Overweight male 18 years and over	Narrowing	Away
1.7b	2.7b	Sound weight loss practices: Overweight female 18 years and over	Narrowing	Away
2.4b		Growth retardation: Low-income children under 1 year	Cannot assess	Met
2.4c		Growth retardation: Low-income children 1 year	Cannot assess	Met
2.11c	14.9c	Breastfeeding: During early postpartum period	Eliminate	Toward
2.11c	14.9c	Breastfeeding: At age 6 months	Narrowing	Toward
2.12d	13.11d	Baby bottle tooth decay	Widening	Toward
2.24b	17.11b	Diabetes prevalence: Puerto Rican 20–74 years	Cannot assess	Cannot assess
2.24c	17.11c	Diabetes prevalence: Mexican American 20–74 years	Narrowing	Away
2.24d	17.11d	Diabetes prevalence: Cuban American 20–74 years	Cannot assess	Cannot assess
2.26b	15.4b	Controlled high blood pressure: Mexican American with high blood pressure 18–74 years	Cannot assess	Cannot assess
3.4e	15.12e, 16.6e	Cigarette smoking prevalence: 18 years and over	Not applicable	Toward
3.20	4.6	Use in past month: Alcohol, 12–17 years	Not applicable	Toward
3.20	4.6	Use in past month: Cocaine, 12–17 years	Widening	No change
3.20	4.6	Use in past month: Cocaine, 18–25 years	Widening	Away
4.2c		Cirrhosis deaths	Widening	Toward
4.3b		Drug-related deaths	Eliminate	Away
5.1b		Adolescent pregnancy: 15–19 years	Widening	Away
5.2b		Unintended pregnancy: 15–44 years	Not applicable	Toward
5.3b		Infertility: Married couples with wives 15–44 years	Eliminate	Met
5.7b		Failure of contraceptive method: Female 15–44 years	Widening	Toward
7.1d		Homicide: Male 15–34 years	Narrowing	Toward
8.1b	17.1b, 21.1b	Years of healthy life	Not applicable	Met
8.2a		Completion of high school: 18–24 years	Narrowing	Toward
8.11		Counties with programs for racial/ethnic minority groups	Not applicable	Cannot assess
9.1d		Unintentional injury deaths: Mexican American male	Narrowing	Toward
9.3g		Motor vehicle crash deaths: Mexican American	Widening	Met
9.6g		Residential fire deaths: Puerto Rican	Eliminate	Met
13.2d		Untreated dental caries: Children 6–8 years	Widening	Away
13.2h		Untreated dental caries: Adolescents 15 years	Narrowing	Toward
13.5c		Gingivitis: Mexican American 35–44 years	Narrowing	Toward
13.5c		Gingivitis: Cuban 35–44 years	Cannot assess	Cannot assess
13.5c		Gingivitis: Puerto Rican 35–44 years	Cannot assess	Cannot assess
13.8c		Protective sealants: Children 8 years	Widening	Away
13.8d		Protective sealants: Adolescents 14 years	Widening	Toward
13.12b		Visited the dentist in the past year: Children 5 years	Narrowing	Toward
13.14d		Regular dental visits: Mexican American 35 years and over	Narrowing	Toward
13.14e		Regular dental visits: Puerto Rican 35 years and over	Widening	Toward
14.1c		Infant mortality: Puerto Rican	Narrowing	Met
14.1f		Neonatal mortality: Puerto Rican	Narrowing	Met
14.1j		Postneonatal mortality: Puerto Rican	Narrowing	Met
14.5c		Low birthweight: Puerto Rican	Narrowing	Away

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Hispanic or Latino—Con.		
14.5d		Very low birthweight: Puerto Rican	Widening	Away
14.11c		Prenatal care in the first trimester	Narrowing	Toward
15.13a		Know blood pressure values: Mexican American male 18 years and over	Widening	Away
15.14b		Blood cholesterol checked: ever, Mexican American 18 years and over	Widening	Toward
15.14d		Blood cholesterol checked: Past 2 years: Mexican American 18 years and over	Narrowing	Toward
16.4b		Cervical cancer deaths	Narrowing	Toward
16.11a		Breast exam and mammogram within past 2 years: 50 years and over	Narrowing	Met
16.12a		Pap test ever: 18 years and over	Narrowing	Toward
16.12a		Pap test within past 3 years: 18 years and over	Narrowing	Toward
17.2d		Limitation in major activity due to chronic conditions: Puerto Rican	Widening	Away
17.4b		People with asthma with activity limitation due to asthma: Puerto Rican	Cannot assess	Cannot assess
17.9c		Diabetes-related deaths: Mexican American	Widening	Away
17.9d		Diabetes-related deaths: Puerto Rican	Widening	Away
17.14d		Patient education for people 18 years and over with diabetes	Widening	Toward
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
18.1c		AIDS incidence: 18 years and over	Narrowing	Met
19.4b		Congenital syphilis	Narrowing	Met
20.11b		Influenza immunizations: Noninstitutionalized people 65 years and over	Widening	Toward
20.11b		Pneumococcal immunizations: Noninstitutionalized people 65 years and over	Widening	Toward
20.3i		Hepatitis A cases	Widening	Toward
20.3k		Hepatitis C cases	Not applicable	Met
20.4c		Tuberculosis new cases	Narrowing	Toward
21.2		Receipt of recommended services: Cholesterol ever checked, adults 18 years and over	Widening	Toward
21.2		Receipt of recommended services: Cholesterol checked in last 2 years, adults 18 years	Widening	Toward
21.2		Receipt of recommended services: Tetanus booster in last 10 years	Widening	Toward
21.2		Receipt of recommended services: Pneumococcal vaccine in lifetime, adults 65 years and over	Widening	Toward
21.2		Receipt of recommended services: Influenza vaccine in last 12 months, adults 65 years and over	Widening	Toward
21.3a		Usual source of care: Mexican American 18 years and over	Narrowing	Toward
21.3a		Usual source of care: 18 years and over	Narrowing	Toward
21.4b		People without health care coverage: Under 65 years	Narrowing	Away
21.4b		People without health care coverage: Mexican American under 65 years	Narrowing	Away
21.4b		People without health care coverage: Puerto Rican under 65 years	Narrowing	Toward
21.4b		People without health care coverage: Cuban under 65 years	Narrowing	Away
21.8		Racial/ethnic minority representation in the health professions: Degrees awarded	Narrowing	Toward
21.8a		Racial/ethnic minority representation in the health professions: Enrolled in schools of nursing	Narrowing	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Hispanic or Latino—Con.		
22.5a		Periodic analysis and publication of data for racial and ethnic groups	Narrowing	Met

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Hispanic or Latino

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	2	8	0	1	2	13	2	15
Toward	1	19	0	15	0	35	5	40
Mixed/No change	0	0	0	1	0	1	0	1
Away	1	9	0	11	0	21	0	21
Cannot assess	0	0	0	0	6	6	1	7
TOTAL	4	36	0	28	8	76	6	84

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Women		
1.2	2.3, 15.10, 17.12	Overweight prevalence	Widening	Away
1.2a	2.3a, 15.10a, 17.12a	Overweight prevalence: Low-income 20–74 years	Narrowing	Away
1.2b	2.3b, 15.10b, 17.12b	Overweight prevalence: Black	Narrowing	Away
1.2c	2.3c, 15.10c, 17.12c	Overweight prevalence: Mexican American	Narrowing	Away
1.2f	2.3f, 15.10f, 17.12f	Overweight prevalence: Females with high blood pressure 20–74 years	Cannot assess	Cannot assess
1.7	2.7	Sound weight loss practices: Overweight, 18 years and over	Not applicable	Away
1.7b	2.7b	Sound weight loss practices: Overweight, Hispanic 18 years and over	Not applicable	Away
2.8		Consumption of foods rich in calcium: Pregnant and lactating	Not applicable	Away
2.8a		Consumption of foods rich in calcium: Meeting average daily goal, 11–24 years	Widening	Away
2.10		Iron deficiency prevalence	Not applicable	Away
2.10		Iron deficiency prevalence: 20–44 years	Not applicable	Away
2.10c		Iron deficiency prevalence: Low-income 20–44 years	Not applicable	Away
2.10e		Anemia prevalence: Black, low-income, pregnant	Not applicable	Away
2.11	14.9	Breastfeeding: During early postpartum period	Not applicable	Toward
2.11a	14.9a	Breastfeeding: During early postpartum period, low-income	Not applicable	Toward
2.11b	14.b	Breastfeeding: During early postpartum period, Black	Not applicable	Toward
2.11c	14.9c	Breastfeeding: During early postpartum period, Hispanic	Not applicable	Toward
2.11d	14.9d	Breastfeeding: During early postpartum period, American Indian/Alaska Native	Not applicable	Toward
2.11	14.9	Breastfeeding: At age 6 months	Not applicable	Toward
2.11a	14.9a	Breastfeeding: At age 6 months, low-income	Not applicable	Toward
2.11b	14.9b	Breastfeeding: At age 6 months, Black	Not applicable	Toward
2.11c	14.9c	Breastfeeding: At age 6 months, Hispanic	Not applicable	Toward
2.11d	14.9d	Breastfeeding: At age 6 months, American Indian/Alaska Native	Not applicable	Away
2.25	15.7	High blood cholesterol prevalence: 20–74 years	Narrowing	Met
2.26c	15.4c	Controlled high blood pressure: 70 years and over	Cannot assess	Cannot assess
2.27	15.6	Mean serum cholesterol level: 20–74 years	Narrowing	Toward
3.2a	16.2a	Slow the rise in lung cancer deaths	Widening	Met
3.4	15.12, 16.6	Cigarette smoking prevalence: 18 years and over	Not applicable	Toward
3.4h	15.12h, 16.6h	Cigarette smoking prevalence: 18–44 years	Not applicable	Toward
3.4i	15.12i, 16.6i	Cigarette smoking prevalence: Pregnant	Not applicable	Toward
3.4j	15.12j, 16.6j	Cigarette smoking prevalence: Use oral contraceptives	Eliminate	Toward
3.7		Smoking cessation during pregnancy	Not applicable	Away
3.7a		Smoking cessation during pregnancy: Less than a high school education	Not applicable	Cannot assess
3.17	13.7, 16.17	Oral cancer deaths: 45–74 years	Not applicable	Met
3.17b	13.7b, 16.17b	Oral cancer deaths: Black: 45–74 years	Not applicable	Met
5.1		Adolescent pregnancy: 15–17 years	Not applicable	Toward
5.1a		Adolescent pregnancy: Black 15–19 years	Not applicable	Toward
5.1b		Adolescent pregnancy: Hispanic 15–19 years	Not applicable	Away
5.2		Unintended pregnancy: 15–44 years	Not applicable	Toward
5.2a		Unintended pregnancy: Black 15–44 years	Not applicable	Toward
5.2b		Unintended pregnancy: Hispanic 15–44 years	Not applicable	Toward
5.3		Infertility: Married couples with wives 15–44 years	Not applicable	Toward
5.3a		Infertility: Married couples with wives 15–44 years, Black	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Women—Con		
5.3b		Infertility: Married couples with wives 15–44 years, Hispanic	Not applicable	Met
5.4	18.3, 19.9	Adolescents who ever engaged in sexual intercourse: 15 years	Not applicable	Toward
5.4	18.3, 19.9	Adolescents who ever engaged in sexual intercourse: 17 years	Not applicable	Away
5.4c	18.3c, 19.9c	Adolescents who ever engaged in sexual intercourse: Black 15–17 years	Not applicable	Toward
5.5	18.15, 19.16	Adolescent abstinence from sexual intercourse for previous 3 months: Sexually active 15–17 years	Not applicable	Toward
5.6		Contraception use: First intercourse,15–19 years	Not applicable	Toward
5.6		Contraception use: Recent intercourse,15–19 years	Not applicable	Away
5.6		Contraception use: Oral contraceptive and the condom at most recent intercourse, 15–19 years	Not applicable	Toward
5.7		Failure of contraceptive method: 15–44 years	Not applicable	Toward
5.7a		Failure of contraceptive method: Black 15–44 years	Not applicable	Away
5.7b		Failure of contraceptive method: Hispanic 15–44 years	Not applicable	Toward
5.8		Persons 13–18 years who have discussed sexuality with parents	Not applicable	Toward
5.9		Family planning counseling	Not applicable	Cannot assess
5.10	14.12	Age-appropriate preconception counseling by clinicians: Inquiry about family planning, nurse practitioners	Not applicable	Away
5.10	14.12	Age-appropriate preconception counseling by clinicians: Counseling about family planning, nurse practitioners	Not applicable	Away
5.10	14.12	Age-appropriate preconception counseling by clinicians: Counseling about family planning, obstetricians/gynecologists	Not applicable	Met
5.11	18.13, 19.11	Clinic services for human immunodeficiency virus (HIV) and other sexually transmitted diseases (STDs): HIV client pretest counseling	Not applicable	Toward
5.11	18.13, 19.11	Clinic services for HIV and other STDs: HIV client testing	Not applicable	Toward
5.12		Contraception use: 15–44 years	Not applicable	Toward
5.12a		Contraception use: Black 15–44 years	Not applicable	Toward
5.12b		Contraception use: 15–44 years, under 100% poverty	Not applicable	Toward
5.12c		Contraception use: 15–19 years, under 200% poverty	Not applicable	Toward
6.2a	7.8a	Suicide attempts: 14–17 years	Widening	Away
6.15a		Prevalence of depression: 18–54 years (1-year prevalence)	Not applicable	Toward
7.1e		Homicide: Black 15–34 years	Narrowing	Met
7.5		Partner abuse	Not applicable	Toward
7.7		Rape and attempted rape: 12 years and over	Not applicable	Toward
7.7a		Rape and attempted rape: 12–34 years	Not applicable	Toward
7.7		Sexual assaults: 12 years and over	Not applicable	Toward
7.12		Emergency room protocols for victims of violence	Not applicable	Cannot assess
7.15		Battered women turned away from shelters	Not applicable	Away
9.6d		Residential fire deaths: Black	Narrowing	Met
9.7a		Hip fractures: White 85 years and over	Narrowing	Toward
11.1c		Asthma hospitalizations: 25 years and over	Widening	Toward
14.1		Infant mortality	Not applicable	Toward
14.1a		Infant mortality: Black	Not applicable	Toward
14.1b		Infant mortality: American Indian/Alaska Native	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Women—Con.		
14.1c		Infant mortality: Puerto Rican	Not applicable	Met
14.1d		Neonatal mortality	Not applicable	Toward
14.1e		Neonatal mortality: Black	Not applicable	Toward
14.1f		Neonatal mortality: Puerto Rican	Not applicable	Met
14.1g		Postneonatal mortality	Not applicable	Met
14.1h		Postneonatal mortality: Black	Not applicable	Toward
14.1i		Postneonatal mortality: American Indian/Alaska Native	Not applicable	Toward
14.1j		Postneonatal mortality: Puerto Rican	Not applicable	Met
14.2		Fetal deaths	Not applicable	Toward
14.2a		Fetal deaths: Black	Not applicable	Toward
14.3		Maternal mortality	Not applicable	Away
14.3a		Maternal mortality: Black	Not applicable	Away
14.4		Fetal alcohol syndrome	Not applicable	Away
14.4a		Fetal alcohol syndrome: American Indian/Alaska Native	Not applicable	Away
14.4b		Fetal alcohol syndrome: Black	Not applicable	Away
14.5		Low birthweight	Not applicable	Away
14.5		Very low birthweight	Not applicable	Away
14.5a		Low birthweight: Black	Not applicable	No change
14.5b		Very low birthweight: Black	Not applicable	Away
14.5c		Low birthweight: Puerto Rican	Not applicable	Away
14.5d		Very low birthweight: Puerto Rican	Not applicable	Away
14.6		Recommended weight gain during pregnancy	Not applicable	Toward
14.7		Severe complications of pregnancy	Not applicable	Met
14.7a		Severe complications of pregnancy: Black	Not applicable	Toward
14.8		Cesarean delivery	Not applicable	Toward
14.8a		Cesarean delivery: Primary	Not applicable	Toward
14.8b		Cesarean delivery: Repeat	Not applicable	Toward
14.10		Abstinence during pregnancy: Tobacco	Not applicable	Toward
14.10		Abstinence during pregnancy: Alcohol	Not applicable	Toward
14.10		Abstinence during pregnancy: Cocaine	Not applicable	No change
14.10		Abstinence during pregnancy: Marijuana	Not applicable	Away
14.11		Prenatal care in the first trimester	Not applicable	Toward
14.11a		Prenatal care in the first trimester: Black	Not applicable	Toward
14.11b		Prenatal care in the first trimester: American Indian/Alaska Native	Not applicable	Toward
14.11c		Prenatal care in the first trimester: Hispanic	Not applicable	Toward
14.13		Screening for fetal abnormalities	Not applicable	Toward
14.14		Pregnant women and infants receiving risk-appropriate care	Not applicable	Cannot assess
14.15		Newborn screening: Sickle cell anemia	Not applicable	Toward
14.15		Newborn screening: Sickle cell anemia, black	Not applicable	Toward
14.15		Newborn screening: Galactosemia	Not applicable	Met
14.15		Newborns diagnosed positive for sickle cell anemia receiving treatment	Not applicable	Met
14.15		Newborns diagnosed positive for galactosemia receiving treatment	Not applicable	Met
14.16		Babies receiving primary care	Not applicable	Cannot assess
14.17		Spina bifida and other neural tube defects	Not applicable	No change
15.4	18.3, 19.9	Controlled high blood pressure: 18–74 years	Not applicable	Toward
16.3		Female breast cancer deaths	Not applicable	Met
16.3a		Female breast cancer deaths: Black	Not applicable	Toward
16.4		Cervical cancer deaths	Not applicable	Toward
16.4a		Cervical cancer deaths: Black	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Women—Con.		
16.4b		Cervical cancer deaths: Hispanic	Not applicable	Toward
16.11		Breast exam and mammogram within past 2 years: 50 years and over	Not applicable	Met
16.11a		Breast exam and mammogram within past 2 years: Hispanic 50 years and over	Not applicable	Met
16.11b		Breast exam and mammogram within past 2 years: Annual family income less than $10,000, 50 years and over	Not applicable	Toward
16.11c		Breast exam and mammogram within past 2 years: Less than high school education, 50 years and over	Not applicable	Toward
16.11d		Breast exam and mammogram within past 2 years: 70 years and over	Not applicable	Toward
16.11e		Breast exam and mammogram within past 2 years: Black 50 years and over	Not applicable	Met
16.12		Pap test ever: 18 years and over	Not applicable	Toward
16.12a		Pap test ever: Hispanic 18 years and over	Not applicable	Toward
16.12b		Pap test ever: 70 years and over	Not applicable	Toward
16.12c		Pap test ever: Less than high school education, 18 years and over	Not applicable	Toward
16.12d		Pap test ever: Annual family income less than $10,000, 18 years and over	Not applicable	Toward
16.12		Pap test within past 3 years: 18 years and over	Not applicable	Toward
16.12a		Pap test within past 3 years: Hispanic 18 years and over	Not applicable	Toward
16.12b		Pap test within past 3 years: 70 years and over	Not applicable	Toward
16.12c		Pap test within past 3 years: Less than high school education, 18 years and over	Not applicable	Toward
16.12d		Pap test within past 3 years: Annual family income less than $10,000, 18 years and over	Not applicable	Toward
16.15		Pap test quality: Monitoring cytology laboratory	Not applicable	Met
16.16		FDA-certified mammography facilities	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: 40–60 years	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: 40–49 years	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: 50–60 years	Not applicable	Met
18.1d		AIDS incidence: 18 years and over	Widening	Met
18.2c		HIV prevalence: females 15–44 years, giving birth to live-born infants	No change	No change
18.4	19.10	Condom use at last sexual intercourse: 15–44 years	Not applicable	Toward
18.4a	19.10a	Condom use at last sexual intercourse: 15–19 years	Not applicable	Toward
18.4d	19.10d	Condom use at last sexual intercourse: Black 15–44 years	Not applicable	Toward
19.1c		Gonorrhea: 15–44 years	Widening	Toward
19.2		Chlamydia prevalence: 15–19 years	Not applicable	Toward
19.2		Chlamydia prevalence: 20–24 years	Not applicable	Met
19.6		Pelvic inflammatory disease hospitalizations: 15–44 years	Not applicable	Toward
19.6a		Pelvic inflammatory disease hospitalizations: Black 15–44 years	Not applicable	Toward
19.6b		Pelvic inflammatory disease hospitalizations: 15–19 years	Not applicable	Toward
19.6		Pelvic inflammatory disease initial visits to physicians	Not applicable	Met
21.2		Receipt of recommended services: Pap test in last 3 years, 18 years and over	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Women—Con.		
21.2		Receipt of recommended services: Pap test in last 3 years, 65 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Pap test in last 3 years, Asian/Pacific Islander 18 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Pap test in last 3 years, American Indian/Alaska Native 18 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Pap test in last 3 years, females with disabilities 18 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, 50 years and over	Not applicable	Met
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, 65 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, females with low income 50 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, Asian/Pacific Islander 50 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, American Indian/Alaska Native 50 years and over	Not applicable	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, females with disabilities 50 years and over	Not applicable	Toward
21.6		Provision of recommended services: Breast exam, nurse practitioners	Not applicable	Away
21.6		Provision of recommended services: Breast exam, obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services: Breast exam, internists	Not applicable	Cannot assess
21.6		Provision of recommended services: Breast exam, family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services: Pap smear, nurse practitioners	Not applicable	Away
21.6		Provision of recommended services: Pap smear, obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services: Pap smear, internists	Not applicable	Cannot assess
21.6		Provision of recommended services: Pap smear, family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, nurse practitioners	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, nurse practitioners, patients 40–49 years	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, nurse practitioners, patients 50 years and over	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, internists	Not applicable	Cannot assess
21.6		Provision of recommended services: Mammogram, family physicians	Not applicable	Cannot assess

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Women

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	3	0	2	0	5	21	26
Toward	1	2	0	2	0	5	98	103
Mixed/No change	0	0	1	0	0	1	3	4
Away	0	3	0	3	0	6	29	35
Cannot assess	0	0	0	0	2	2	17	19
TOTAL	1	8	1	7	2	19	168	187

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with low socioeconomic status		
1.2a,	2.3a, 15.10a	Overweight prevalence: Female 20–74 years	Narrowing	Away
1.4a		Vigorous physical activity: 18 years and over	Narrowing	Toward
1.5c		Sedentary lifestyle: 18 years and over	Narrowing	Toward
2.4		Growth retardation: Children 5 years and under	Not applicable	Met
2.4a		Growth retardation: Black children under 1 year	Not applicable	No change
2.4b		Growth retardation: Hispanic children under 1 year	Not applicable	Met
2.4c		Growth retardation: Hispanic children 1 year	Not applicable	Met
2.4d		Growth retardation: Asian/Pacific Islander children 1 year	Not applicable	Met
2.4e		Growth retardation: Asian/Pacific Islander children 2–4 years	Not applicable	Met
2.10a		Iron deficiency prevalence: Children 1–2 years	Cannot assess	Toward
2.10b		Iron deficiency prevalence: Children 3–4 years	Cannot assess	Toward
2.10c		Iron deficiency prevalence: Female 20–44 years	Narrowing	Away
2.10e		Anemia prevalence: Black pregnant female	Not applicable	Away
2.11a	14.9a	Breastfeeding: During early postpartum period	Narrowing	Toward
2.11a	14.9a	Breastfeeding: At age 6 months	Narrowing	Toward
2.12a	13.11a	Baby bottle tooth decay: Less than high school education	Widening	Toward
3.4a	15.12a	Cigarette smoking prevalence: People with high school education or less, 18 years and over	Widening	Toward
3.4b	15.12b	Cigarette smoking prevalence: Blue-collar workers 18 years and over	Widening	Toward
3.5a		Smoking initiation: Ages 20–24 years with high school education or less	Cannot assess	Away
3.7a		Smoking cessation during pregnancy: Less than high school education	Cannot assess	Cannot assess
4.12		States with access to treatment programs, underserved	Not applicable	Met
5.12b		Contraception use: Female 15–44 years under 100% of poverty	Narrowing	Toward
5.12c		Contraception use: Female 15–19 years under 200% of poverty	Narrowing	Toward
8.2		Completion of high school: 18–24 years	Not applicable	Away
8.2a		Completion of high school: Hispanic 18–24 years	Not applicable	Toward
8.2b		Completion of high school: Black 18–24 years	Not applicable	Away
8.3		Eligible children 4 years afforded opportunity to enroll in Head Start	Not applicable	Toward
8.3		Low-income children receiving 1 year of Head Start services prior to entering kindergarten or first grade	Not applicable	Away
8.7		Hourly workers participating in health promotion activities: 18 years and over	Not applicable	Met
11.4a		Blood lead levels: Inner-city low-income black children 6 months–5 years, levels exceeding 15ug/dL	Widening	Toward
11.4a		Blood lead levels: Inner-city low-income black children 6 months–5 years, levels exceeding 25ug/dL	Widening	Toward
13.1a		Dental caries: Parents who have less than a high school education, children 6–8 years	Narrowing	Toward
13.2a		Untreated dental caries: Parents who have less than a high school education, children 6–8 years	Narrowing	Away
13.2e		Untreated dental caries: Parents who have less than high school education, adolescents 15 years	Narrowing	Toward
13.4a		Complete tooth loss: Annual family income less than $15,000, 65 years and over	Widening	Toward

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Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with low socioeconomic status—Con.		
13.5a		Gingivitis: Annual family income less than $12,500, 35–44 years	Widening	Away
16.11b		Breast exam and mammogram within past 2 years: Annual family income less than $10,000, 50 years and over	Narrowing	Toward
16.11c		Breast exam and mammogram within past 2 years: Less than high school education, 50 years and over	Narrowing	Toward
16.12c		Pap test ever: Less than high school education, 18 years and over	Narrowing	Toward
16.12d		Pap test ever: Annual family income less than $10,000, 18 years and over	Narrowing	Toward
16.12c		Pap test within past 3 years: Less than high school education,18 years and over	Narrowing	Toward
16.12d		Pap test within past 3 years: Annual family income less than $10,000, 18 years and over	Narrowing	Toward
17.2a		Limitation in major activity due to chronic conditions: Annual family income less than $10,000, 18 years and over	Widening	Away
17.2a		Limitation in major activity due to chronic conditions: Below poverty level	Widening	Away
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
20.15		Employment-based conventional insurance plans for immunizations	Not applicable	Toward
20.15		Employment-based preferred provider organization plans for immunizations	Not applicable	Toward
20.15		Employment-based health maintenance organization plans for immunizations	Not applicable	Away
21.2		Receipt of recommended services, adults 65 years and over: Pneumococcal vaccine in lifetime	Widening	Toward
21.2		Receipt of recommended services, adults 18 years and over: Cholesterol ever checked	Narrowing	Toward
21.2		Receipt of recommended services, women 50 years and over: Breast exam and mammogram in past 2 years	Narrowing	Toward
21.2		Receipt of recommended services, adults 65 years and over: Influenza vaccine in 12 months	No change	Toward
21.2		Receipt of recommended services, adults 18 years and over: Cholesterol checked in last 2 years	Narrowing	Toward
21.3c		Usual source of care, 18 years and over: Family income below poverty line	Narrowing	Toward
21.4		People without health care coverage: Under 65 years	Not applicable	Away
21.4a		People without health care coverage: American Indian/Alaska Native, under 65 years	Not applicable	Away
21.4b		People without health care coverage: Hispanic, under 65 years	Not applicable	Away
21.4b		People without health care coverage: Mexican American, under 65 years	Not applicable	Away
21.4b		People without health care coverage: Puerto Rican, under 65 years	Not applicable	Toward
21.4b		People without health care coverage: Cuban, under 65 years	Not applicable	Away
21.4c		People without health care coverage: Black, under 65 years	Not applicable	Toward
21.5		Clinical preventive services from Federal programs: Immunizations	Not applicable	Cannot assess

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with low socioeconomic status—Con.		
21.5		Clinical preventive services from Federal programs: Counseling	Not applicable	Cannot assess
21.5		Clinical preventive services from Federal programs: Screening	Not applicable	Cannot assess

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: People with low socioeconomic status

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	0	0	0	0	0	7	7
Toward	0	18	1	7	2	28	8	36
Mixed/No change	0	0	0	0	0	0	1	1
Away	0	3	0	3	1	7	10	17
Cannot assess	0	0	0	0	1	1	3	4
TOTAL	0	21	1	10	4	36	29	65

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with disabilities		
1.2e	2.3e, 15.10e, 17.12e	Overweight prevalence: 20 years and over	Narrowing	Away
1.5b		Sedentary lifestyle: 18 years and over	Narrowing	Toward
1.13	17.3	Difficulty performing self-care activities: 70 years and over	Not applicable	Away
1.13a	17.3a	Difficulty performing self-care activities: 85 years and over	Not applicable	Away
1.13b	17.3b	Difficulty performing self-care activities: Black 70 years and over	Not applicable	Away
6.5a		Adverse health effects from stress: 18 years and over	Widening	Toward
6.6		Use of community support among people 18 years and over with severe mental disorders	Not applicable	Met
6.7		Treatment for depression: 18–54 years	Not applicable	Away
6.8a		People 18 and over seeking help with emotional/personal problems	Not applicable	Toward
6.15		Prevalence of depression: 18–54 years	Not applicable	Away
6.15a		Prevalence of depression: Female 18–54 years	Not applicable	Toward
8.1	17.1, 21.1	Years of healthy life	Not applicable	Met
8.1a	17.1a, 21.1a	Years of healthy life: Black	Not applicable	Toward
8.1b	17.1b, 21.1b	Years of healthy life: Hispanic	Not applicable	Met
8.1c	17.1c, 21.1c	Years of healthy life: 65 years and over	Not applicable	Toward
8.3		Preschool child development programs: Children 3–5 years enrolled in preschool	Not applicable	Toward
9.9		Nonfatal head injuries	Not applicable	Met
9.10		Nonfatal spinal cord injuries	Not applicable	Met
9.10a		Nonfatal spinal cord injuries: Male	Not applicable	Toward
9.11		Incidence of secondary conditions associated with traumatic spinal cord injuries	Not applicable	Cannot assess
9.22		States with linked emergency medical services and trauma systems	Not applicable	Met
11.2	17.8	Serious mental retardation: Children 10 years with IQ less than 50	Not applicable	Away
14.4		Fetal alcohol syndrome	Not applicable	Away
14.4a		Fetal alcohol syndrome: American Indian/Alaska Native	Not applicable	Away
14.4b		Fetal alcohol syndrome: Black	Not applicable	Away
14.15		Newborn screening: Sickle cell anemia	Not applicable	Toward
14.15		Newborn screening: Sickle cell anemia, black	Not applicable	Toward
14.15		Newborn screening: Galactosemia	Not applicable	Met
14.15		Newborns diagnosed positive for galactosemia receiving treatment	Not applicable	Met
14.15		Newborns diagnosed positive for sickle cell anemia receiving treatment	Not applicable	Met
14.17		Spina bifida and other neural tube defects	Not applicable	No change
17.2		Limitation in major activity due to chronic conditions	Not applicable	Away
17.2a		Limitation in major activity due to chronic conditions: Annual family income less than $10,000	Not applicable	Away
17.2a		Limitation in major activity due to chronic conditions: Below poverty level	Not applicable	Away
17.2b		Limitation in major activity due to chronic conditions: American Indian/Alaska Native	Not applicable	Away
17.2c		Limitation in major activity due to chronic conditions: Black	Not applicable	Away
17.2d		Limitation in major activity due to chronic conditions: Puerto Rican	Not applicable	Away

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with disabilities—Con.		
17.4		People with asthma with activity limitation due to asthma	Not applicable	Away
17.4a		People with asthma with activity limitation due to asthma: Black	Not applicable	Toward
17.4b		People with asthma with activity limitation due to asthma: Puerto Ricans	Not applicable	Cannot assess
17.5		Activity limitation due to chronic back conditions	Not applicable	Away
17.6		Significant hearing impairment	Not applicable	Toward
17.6a		Significant hearing impairment: People 45 years and over	Not applicable	Toward
17.7		Significant visual impairment	Not applicable	Toward
17.7a		Significant visual impairment: People 65 years and over	Not applicable	Toward
17.10		Diabetes-related complications: End-stage renal disease	Not applicable	Away
17.10		People with diabetes: Blindness	Not applicable	No change
17.10		People with diabetes: Lower extremity amputation	Not applicable	Toward
17.10a		End-stage renal disease due to diabetes: Black with diabetes	Not applicable	Away
17.10b		End-stage renal disease due to diabetes: American Indian/Alaska Native with diabetes	Not applicable	Away
17.10c		Lower extremity amputations due to diabetes: Black	Not applicable	Away
17.14a		Patient education for people 18 years and over with diabetes	Not applicable	Toward
17.14b		Patient education for people 18 years and over with asthma	Not applicable	Away
17.14c		Patient education for people 18 years and over with diabetes: Black	Not applicable	Toward
17.14d		Patient education for people 18 years and over with diabetes: Hispanic	Not applicable	Toward
17.15		Clinician assessment of childhood development, nurse practitioners	Not applicable	Away
17.16		Early detection of significant hearing impairment in children	Not applicable	Away
17.16a		Early detection of significant hearing impairment in children: Black	Not applicable	Cannot assess
17.17		Clinician assessment in adults 65 years and over: Visual acuity testing, nurse practitioners	Not applicable	Away
17.17		Clinician assessment in adults 65 years and over: Prescription of mobility aids/modification, nurse practitioners	Not applicable	Toward
17.19		Worksites with policies for hiring people with disabilities	Not applicable	Met
17.20		Service systems for children with or at risk of chronic and disabling conditions	Not applicable	Cannot assess
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
17.23		People with diabetes who had a dilated eye exam in the past year	Not applicable	Toward
20.11		Basic immunization series among children: Children 2 years and under	Not applicable	Cannot assess
20.11		Basic immunization series among children 19–35 months: Diphtheria-tetanus-pertussis	Not applicable	Met
20.11		Basic immunization series among children 19–35 months: Polio	Not applicable	Met
20.11		Basic immunization series among children 19–35 months: Measles-containing	Not applicable	Met

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		People with disabilities—Con.		
20.11		Basic immunization series among children 19–35 months: Haemophilus influenza type b	Not applicable	Met
20.11		Basic immunization series among children 19–35 months: Hepatitis B	Not applicable	Toward
20.11		Basic immunization series among children 19–35 months: 4DTP/3Polio/1MMR	Not applicable	Toward
20.11		Basic immunization series among children: Children in licensed child care facilities	Not applicable	Met
20.11		Basic immunization series among children: Children in kindergarten through postsecondary education institutions	Not applicable	Met
20.11		Hepatitis B immunizations: Infants of antigen-positive mothers	Not applicable	Toward
20.11		Hepatitis B immunizations: Occupationally exposed workers	Not applicable	Toward
20.11		Hepatitis B immunizations: Injecting drug users in drug treatment programs	Not applicable	Cannot assess
20.11		Hepatitis B immunizations: Men who have sex with men	Not applicable	Toward
20.11		Pneumococcal immunizations: Institutionalized chronically ill people or older people	Not applicable	Toward
20.11		Pneumococcal immunizations: Noninstitutionalized people 65 years and over	Not applicable	Toward
20.11a		Pneumococcal immunizations, noninstitutionalized people 65 years and over: Black	Not applicable	Toward
20.11b		Pneumococcal immunizations, noninstitutionalized people 65 years and over: Hispanic	Not applicable	Toward
20.11		Influenza immunizations: Institutionalized chronically ill people or older people	Not applicable	Toward
20.11		Influenza immunizations: Noninstitutionalized people 65 years and over	Not applicable	Met
20.11a		Influenza immunizations, noninstitutionalized people 65 years and over: Black	Not applicable	Toward
20.11b		Influenza immunizations, noninstitutionalized people 65 years and over: Hispanic	Not applicable	Toward
21.2		Receipt of recommended services: Tetanus booster in last 10 years, 18 years and over	Narrowing	Toward
21.2		Receipt of recommended services: Pap test in last 3 years, women 18 years and over	Widening	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, women 50 years and over	Widening	Toward

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: People with disabilities

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	0	0	0	0	0	17	17
Toward	0	2	0	3	0	5	33	38
Mixed/No change	0	0	0	0	0	0	2	2
Away	0	1	0	0	0	1	25	26
Cannot assess	0	0	0	0	0	0	6	6
TOTAL	0	3	0	3	0	6	83	89

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults		
1.1	2.1, 3.1, 15.1	Coronary heart disease deaths	Not applicable	Met
1.1a	2.1a, 3.1a, 15.1a	Coronary heart disease deaths: Black	Not applicable	Toward
1.2	2.3, 15.10, 17.12	Overweight prevalence	Not applicable	Away
1.2	2.3, 15.10, 17.12	Overweight prevalence: Male	Not applicable	Away
1.2	2.3, 15.10, 17.12	Overweight prevalence: Female	Not applicable	Away
1.2a	2.3a, 15.10a, 17.12a	Overweight prevalence: Low-income female 20–74 years	Not applicable	Away
1.2b	2.3b, 15.10b, 17.12b	Overweight prevalence: Black female	Not applicable	Away
1.2c	2.3c, 15.10c, 17.12c	Overweight prevalence: Mexican American female	Not applicable	Away
1.2d	2.3d, 15.10d, 17.12d	Overweight prevalence: American Indian/Alaska Native 20 years and over	Not applicable	Toward
1.2e	2.3e, 15.10e, 17.12e	Overweight prevalence: People with disabilities 20 years and over	Not applicable	Away
1.2f	2.3f, 15.10f, 17.12f	Overweight prevalence: Females with high blood pressure 20–74 years	Not applicable	Cannot assess
1.2g	2.3g, 15.10g, 17.12g	Overweight prevalence: Males with high blood pressure 20–74 years	Not applicable	Cannot assess
1.2h	2.3h, 15.10h, 17.12h	Overweight prevalence: Mexican American male	Not applicable	Away
1.3	15.11, 17.13	Light to moderate physical activity, 5 or more times per week: 18 years and over	Not applicable	Met
1.3	15.11, 17.13	Light to moderate physical activity, 7 or more times per week: 18 years and over	Not applicable	Toward
1.3a	15.11a, 17.13a	Light to moderate physical activity, 5 or more times per week: Hispanic 18 years	Not applicable	Met
1.5a		Sedentary lifestyle: 65 years and over	Eliminate	Met
1.13	17.3	Difficulty performing self-care activities: 70 years and over	Not applicable	Away
1.13a	17.3a	Difficulty performing self-care activities: People 85 years and over	Widening	Away
1.13b	17.3b	Difficulty performing self-care activities: Black 70 years and over	Not applicable	Away
2.2	16.1	Cancer deaths	Not applicable	Met
2.2a	16.1a	Cancer deaths: Black	Not applicable	Met
2.5	15.9, 16.7	Dietary fat intake, National Health and Nutrition Examination Survey (NHANES): Average percent of calories from total fat	Not applicable	Toward
2.5	15.9, 16.7	Dietary fat intake, NHANES: Average percent of calories from saturated fat	Not applicable	Toward
2.5	15.9, 16.7	Dietary fat intake, Continuing Survey of Food Intakes by Individuals (CSFII): Average percent of calories from total fat	Not applicable	Toward
2.5	15.9, 16.7	Dietary fat intake, CSFII: Met goal for fat	Not applicable	Toward
2.5	15.9, 16.7	Dietary fat intake, CSFII: Average percent of calories from saturated fat	Not applicable	Toward
2.5	15.9, 16.7	Dietary fat intake, CSFII: Met goal for saturated fat	Not applicable	Toward
2.6	16.8	Average daily intake of vegetables, fruits, and grain products	Not applicable	Toward
2.6	16.8	Average number of daily servings: Vegetables and fruits	Not applicable	Toward
2.6	16.8	Average number of daily servings: Grain products	Not applicable	Met
2.6	16.8	Met Dietary Guidelines goal: Vegetables and fruits	Not applicable	Toward
2.6	16.8	Met Dietary Guidelines goal: Grain products	Not applicable	Met
2.8		Consumption of foods rich in calcium: 25 years and over	Not applicable	No change
2.18		Receipt of home-delivered meals: People 65 years and over in need	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults—Con.		
2.22	3.18, 15.2	Stroke deaths	Not applicable	Toward
2.22a	3.18a, 15.2a	Stroke deaths: Black	Not applicable	Toward
2.23	16.5	Colorectal cancer deaths	Not applicable	Met
2.23a	16.5a	Colorectal cancer deaths: Black	Not applicable	Toward
2.24	17.11	Diabetes incidence	Not applicable	Away
2.24	17.11	Diabetes prevalence	Not applicable	Away
2.24a	17.11a	Diabetes prevalence: American Indian/Alaska Native 15 years and over	Not applicable	Away
2.24b	17.11b	Diabetes prevalence: Puerto Rican 20–74 years	Not applicable	Cannot assess
2.24c	17.11c	Diabetes prevalence: Mexican American 20–74 years	Not applicable	Away
2.24d	17.11d	Diabetes prevalence: Cuban American 20–74 years	Not applicable	Cannot assess
2.24e	17.11e	Diabetes prevalence: Black	Not applicable	Away
2.26c	15.4c	Controlled high blood pressure: Females with high blood pressure 70 years and over	Cannot assess	Cannot assess
3.2	16.2	Slow the rise in lung cancer deaths	Not applicable	Met
3.2a	16.2a	Slow the rise in lung cancer deaths: Female	Not applicable	Met
3.2b	16.2b	Slow the rise in lung cancer deaths: Black male	Not applicable	Met
3.17	13.7, 16.17	Oral cancer deaths: Male 45–74 years	Not applicable	Met
3.17	13.7, 16.17	Oral cancer deaths: Female 45–74 years	Not applicable	Met
3.17a	13.7a, 16.17a	Oral cancer deaths: Black male 45–74 years	Not applicable	Met
3.17b	13.7b, 16.17b	Oral cancer deaths: Black female 45–74 years	Not applicable	Met
6.1c	7.2c	Suicide: White male 65 years and over	Narrowing	Met
8.1	17.1, 21.1	Years of healthy life	Not applicable	Met
8.1a	17.1a, 21.1a	Years of healthy life: Black	Not applicable	Toward
8.1b	17.1b, 21.1b	Years of healthy life: Hispanic	Not applicable	Met
8.1c	17.1c, 21.1c	Years of healthy life: 65 years and over	Narrowing	Toward
8.8		Health promotion programs for adults 65 years and over	Not applicable	No change
9.3c		Motor vehicle crash deaths: 70 years and over	Widening	Toward
9.4a		Fall-related deaths: 65–84 years	Widening	Away
9.4b		Fall-related deaths: 85 years and over	Widening	Away
9.6b		Residential fire deaths: 65 years and over	Widening	Met
9.7		Hip fractures: 65 years and over	Not applicable	Away
9.7a		Hip fractures: White females 85 years and over	Narrowing	Toward
12.6		Providers reviewing medication, maintenance of current medication list: Nurse practitioners	Not applicable	Toward
12.6		Providers reviewing medication, review of medications when prescribing: Nurse practitioners	Not applicable	Toward
13.4		Complete tooth loss: 65 years and over	Not applicable	Toward
13.4a		Complete tooth loss: Annual family income less than $15,000, 65 years and over	Not applicable	Toward
13.4b		Complete tooth loss: American Indian/Alaska Native 65 years and over	Not applicable	Toward
13.13		Oral health care at institutional facilities: Nursing facilities	Not applicable	Toward
13.14		Regular dental visits: 35 years and over	Not applicable	Toward
13.14a		Regular dental visits: Edentulous people, 35 years and over	Not applicable	Toward
13.14b		Regular dental visits: 65 years and over	Narrowing	Toward
13.14c		Regular dental visits: Black 35 years and over	Not applicable	Toward
13.14d		Regular dental visits: Mexican American 35 years and over	Not applicable	Toward
13.14e		Regular dental visits: Puerto Rican 35 years and over	Not applicable	Toward
16.3		Female breast cancer deaths	Not applicable	Met

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults—Con.		
16.3a		Female breast cancer deaths: Black	Not applicable	Toward
16.4		Cervical cancer deaths	Not applicable	Toward
16.4a		Cervical cancer deaths: Black	Not applicable	Toward
16.4b		Cervical cancer deaths: Hispanic	Not applicable	Toward
16.11		Breast exam and mammogram within past 2 years: 50 years and over	Not applicable	Met
16.11a		Breast exam and mammogram within past 2 years: Hispanic 50 years and over	Not applicable	Met
16.11b		Breast exam and mammogram within past 2 years: Annual family income less than $10,000, 50 years and over	Not applicable	Toward
16.11c		Breast exam and mammogram within past 2 years: Less than high school education, 50 years and over	Not applicable	Toward
16.11d		Breast exam and mammogram within past 2 years: 70 years and over	Not applicable	Toward
16.11e		Breast exam and mammogram within past 2 years: Black 50 years and over	Not applicable	Met
16.12b		Pap test ever: 70 years and over	Narrowing	Toward
16.12b		Pap test within past 3 years: 70 years and over	Narrowing	Toward
16.13		Colon screen, fecal occult blood test within past 2 years: 50 years and over	Not applicable	Toward
16.13		Colon screen sigmoidoscopy ever: 50 years and over	Not applicable	Toward
16.14		Oral exam within past year: 50 years and over	Not applicable	Toward
16.14		Skin exam within past year: 50 years and over	Not applicable	Away
16.14		Digital rectal exam within past year: 50 years and over	Not applicable	Toward
17.2		Limitation in major activity due to chronic conditions	Not applicable	Away
17.2a		Limitation in major activity due to chronic conditions: Annual family income less than $10,000	Not applicable	Away
17.2a		Limitation in major activity due to chronic conditions: Below poverty level	Not applicable	Away
17.2b		Limitation in major activity due to chronic conditions: American Indian/Alaska Native	Not applicable	Away
17.2c		Limitation in major activity due to chronic conditions: Black	Not applicable	Away
17.2d		Limitation in major activity due to chronic conditions: Puerto Rican	Not applicable	Away
17.4		People with asthma with activity limitation due to asthma	Not applicable	Away
17.4a		People with asthma with activity limitation due to asthma: Black	Not applicable	Toward
17.4b		People with asthma with activity limitation due to asthma: Puerto Rican	Not applicable	Cannot assess
17.5		Activity limitation due to chronic back conditions	Not applicable	Away
17.6		Significant hearing impairment	Not applicable	Toward
17.6a		Significant hearing impairment: People 45 years and over	Widening	Toward
17.7		Significant visual impairment	Not applicable	Toward
17.7a		Significant visual impairment: People 65 years and over	Widening	Toward
17.9		Diabetes-related deaths	Not applicable	Away
17.9a		Diabetes-related deaths: Black	Not applicable	Away
17.9b		Diabetes-related deaths: American Indian/Alaska Native	Not applicable	Away
17.9c		Diabetes-related deaths: Mexican American	Not applicable	Away
17.9d		Diabetes-related deaths: Puerto Rican	Not applicable	Met

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults—Con.		
17.10		People with diabetes: End-stage renal disease	Not applicable	Away
17.10		People with diabetes: Blindness	Not applicable	No change
17.10		People with diabetes: Lower extremity amputation	Not applicable	Toward
17.10a		End-stage renal disease due to diabetes: Black	Not applicable	Away
17.10b		End-stage renal disease due to diabetes: American Indian/Alaska Native	Not applicable	Away
17.10c		Lower extremity amputations due to diabetes: Black	Not applicable	Away
17.17		Clinician assessment in adults 65 years and over: Visual acuity testing, nurse practitioners	Not applicable	Away
17.17		Clinician assessment in adults 65 years and over: Prescription of mobility aids/modification, nurse practitioners	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: Female 40–60 years	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: Female 40–49 years	Not applicable	Toward
17.18		Counseled about estrogen replacement therapy: Female 50–60 years	Not applicable	Met
20.2		Epidemic-related pneumonia and influenza deaths: 65 years and over	Not applicable	Met
20.10		Pneumonia-related restricted activity days: 65 years and over	Not applicable	Away
20.11		Pneumococcal immunizations: Institutionalized chronically ill people or older people	Not applicable	Toward
20.11		Pneumococcal immunizations: Noninstitutionalized people 65 years and over	Not applicable	Toward
20.11		Influenza immunizations: Institutionalized chronically ill people or older people	Not applicable	Toward
20.11		Influenza immunizations: Noninstitutionalized people 65 years and over	Not applicable	Met
20.11a		Pneumococcal immunizations: Noninstitutionalized black people 65 years and over	Not applicable	Toward
20.11b		Pneumococcal immunizations: Noninstitutionalized Hispanic people 65 years and over	Not applicable	Toward
20.11a		Influenza immunizations: Noninstitutionalized black people 65 years and over	Not applicable	Toward
20.11b		Influenza immunizations: Noninstitutionalized Hispanic people 65 years and over	Not applicable	Toward
20.14		Influenza vaccination: Nurse practitioners	Not applicable	Toward
20.14		Influenza vaccination: Obstetricians/gynecologists	Not applicable	Cannot assess
20.14		Influenza vaccination: Internists	Not applicable	Cannot assess
20.14		Influenza vaccination: Family physicians	Not applicable	Cannot assess
20.14		Pneumococcal vaccination: Nurse practitioners	Not applicable	Toward
20.14		Pneumococcal vaccination: Obstetricians/gynecologists	Not applicable	Cannot assess
20.14		Pneumococcal vaccination: Internists	Not applicable	Cannot assess
20.14		Pneumococcal vaccination: Family physicians	Not applicable	Cannot assess
21.2		Receipt of recommended services: Routine check-up	Not applicable	Toward
21.2		Receipt of recommended services, adults 65 years and over: Tetanus booster in last 10 years	Narrowing	Toward
21.2		Receipt of recommended services, adults 65 years and over: Pneumococcal vaccine in lifetime	Not applicable	Toward
21.2		Receipt of recommended services, adults 65 years and over: Pneumococcal vaccine in lifetime, people with low income	Not applicable	Toward
21.2		Receipt of recommended services, pneumococcal vaccine in lifetime, adults 65 years and over: Black	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults—Con.		
21.2		Receipt of recommended services, pneumococcal vaccine in lifetime, adults 65 years and over: Hispanic	Not applicable	Toward
21.2		Receipt of recommended services, pneumococcal vaccine in lifetime, adults 65 years and over: Asian/Pacific Islander	Not applicable	Toward
21.2		Receipt of recommended services, adults 65 years and over: Influenza vaccine in last 12 months	Not applicable	Met
21.2		Receipt of recommended services: Influenza vaccine in last 12 months, People with low income	Not applicable	Toward
21.2		Receipt of recommended services, influenza vaccine in last 12 months, adults 65 years and over: Black	Not applicable	Toward
21.2		Receipt of recommended services, influenza vaccine in last 12 months, adults 65 years and over: Hispanic	Not applicable	Toward
21.2		Receipt of recommended services, influenza vaccine in last 12 months, adults 65 years and over: Asian/Pacific Islander	Not applicable	Met
21.2		Receipt of recommended services, women 18 years and over: Pap test in last 3 years	Narrowing	Toward
21.2		Receipt of recommended services, women 50 years and over: Breast exam and mammogram in past 2 years	Not applicable	Met
21.2		Receipt of recommended services, women 65 years and over: Breast exam and mammogram in past 2 years	Narrowing	Toward
21.2		Receipt of recommended services: Breast exam and mammogram in past 2 years, females with low income 50 years and over	Not applicable	Toward
21.2		Receipt of recommended services, women 50 years and over, breast exam and mammogram in past 2 years: Asian/Pacific Islander	Not applicable	Toward
21.2		Receipt of recommended services, women 50 years and over, breast exam and mammogram in past 2 years: American Indian/Alaska Native	Not applicable	Toward
21.2		Receipt of recommended services, women 50 years and over, breast exam and mammogram in past 2 years: Females with disabilities	Not applicable	Toward
21.2		Receipt of recommended services: Asked at least one screening question at routine checkup	Eliminate	Toward
21.6		Provision of recommended services, adults 65 years and over: Influenza vaccination nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, adults 65 years and over: Influenza vaccination, obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 65 years and over: Influenza vaccination, internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 65 years and over: Influenza vaccination, family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 65 years and over: Pneumococcal vaccination, nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, adults 65 years and over: Pneumococcal vaccination, obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 65 years and over: Pneumococcal vaccination, internists	Not applicable	Cannot assess

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Older adults—Con.		
21.6		Provision of recommended services, adults 65 years and over: Pneumococcal vaccination, family physicians	Not applicable	Cannot assess

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Older adults

Objective status	*Disparity Measure*							
	Eliminated	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	1	1	0	1	0	3	28	31
Toward	1	8	0	3	0	12	71	83
Mixed/No change	0	0	0	0	0	0	3	3
Away	0	0	0	3	0	3	35	38
Cannot assess	0	0	0	0	1	1	17	18
TOTAL	2	9	0	7	1	19	154	173

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults		
1.2	2.3, 15.10, 17.12	Overweight prevalence	Cannot assess	Away
1.3	15.11,17.13	Light to moderate physical activity: 5 or more times per week	Not applicable	Met
1.3	15.11,17.13	Light to moderate physical activity: 7 or more times per week	Not applicable	Toward
1.4		Vigorous physical activity: 10–17 years	Not applicable	Cannot assess
1.4		Vigorous physical activity: Grades 9–12	Not applicable	Toward
1.6		Strengthening 4 or more times per week: Grades 9–12	Cannot assess	Met
1.6		Stretching 4 or more times per week: Grades 9–12	Cannot assess	Met
1.8		Daily school physical education: Grades 1–12	Not applicable	Cannot assess
1.8		Daily school physical education: Grades 9–12	Not applicable	Away
1.9		Active physical education class time: Grades 9–12, 21 or more minutes, 3-5 times per week	Not applicable	Toward
1.9		Active physical education class time: Grades 9–12, 30 or more minutes, 1 or more times per week	Not applicable	Toward
1.9		Active physical education class time: All students	Not applicable	Cannot assess
2.8		Consumption of foods rich in calcium: 11–24 years	Not applicable	Away
2.8		Consumption of foods rich in calcium: Pregnant and lactating females	Not applicable	Away
2.8a		Consumption of foods rich in calcium: Meeting average daily goal, female 11–24 years	Not applicable	Away
2.13		Use of food labels: 18 years and over	Not applicable	Toward
3.5		Smoking initiation: Proxy 20–24 years	Not applicable	Toward
3.5a		Smoking initiation: Proxy 20–24 years with a high school education or less	Not applicable	Away
3.9	13.17	Smokeless tobacco use: Male 12–17 years	Not applicable	Met
3.9	13.17	Smokeless tobacco use: Male 18–24 years	Not applicable	Toward
3.9a	13.17a	Smokeless tobacco use: American Indian/Alaska Native 18–24 years	Not applicable	Cannot assess
3.15		Tobacco product advertising and promotion to youth	Not applicable	Cannot assess
3.19	4.5	Average age of first use: Cigarettes	Not applicable	Toward
3.19	4.5	Average age of first use: Alcohol	Not applicable	No change
3.19	4.5	Average age of first use: Marijuana	Not applicable	Toward
3.20	4.6	Use in past month: Alcohol, 12–17 years	Not applicable	Toward
3.20	4.6	Use in past month: Alcohol, 18–20 years	Not applicable	Toward
3.20	4.6	Use in past month: Alcohol, Hispanic 12–17 years	Not applicable	Toward
3.20	4.6	Use in past month: Marijuana, 12–17 years	Not applicable	Away
3.20	4.6	Use in past month: Marijuana, 18–25 years	Not applicable	Toward
3.20	4.6	Use in past month: Cocaine, 12–17 years	Not applicable	Toward
3.20	4.6	Use in past month: Cocaine, 18–25 years	Not applicable	Met
3.20	4.6	Use in past month: Cocaine, Hispanic 12–17 years	Not applicable	No change
3.20	4.6	Use in past month: Cocaine, Hispanic 18–25 years	Not applicable	Away
3.20	4.6	Use in past month: Cigarettes, 12–17 years	Not applicable	Toward
3.21	4.9	Perception of social disapproval by high school seniors: Heavy use of alcohol	Not applicable	Toward
3.21	4.9	Perception of social disapproval by high school seniors: Occasional use of marijuana	Not applicable	Away
3.21	4.9	Perception of social disapproval by high school seniors: Trying cocaine once or twice	Not applicable	Away
3.21	4.9	Perception of social disapproval by high school seniors: Smoking one or more packs of cigarettes per day	Not applicable	Away
3.22	4.10	Perception of harm by high school seniors: Heavy use of alcohol	Not applicable	Away

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
3.22	4.10	Perception of harm by high school seniors: Regular use of marijuana	Not applicable	Away
3.22	4.10	Perception of harm by high school seniors: Trying cocaine once or twice	Not applicable	Away
3.22	4.10	Perception of harm by high school seniors: Smoking one or more packs of cigarettes per day	Not applicable	Toward
3.22	4.10	Perception of harm by high school seniors: Using smokeless tobacco regularly	Not applicable	Toward
4.1b	9.23	Alcohol-related motor vehicle deaths: 15-24 years	Narrowing	Met
4.7		Heavy drinking in past 2 weeks: High school seniors	Not applicable	Toward
4.7		Heavy drinking in past 2 weeks: College students	Not applicable	Toward
4.8		Alcohol consumption: 14 years and over	Not applicable	Toward
4.11		Anabolic steroid use: Male high school seniors	Not applicable	Met
4.13		Alcohol and drug education in schools	Not applicable	Cannot assess
4.18		States with zero tolerance blood alcohol levels: Under 21 years	Not applicable	Met
5.1		Pregnancy: 15–17 years	Not applicable	Toward
5.1a		Pregnancy: Black 15–19 years	Not applicable	Toward
5.1b		Pregnancy: Hispanic 15–19 years	Not applicable	Away
5.4	18.3, 19.9	Ever engaged in sexual intercourse: Female 15 years	Not applicable	Toward
5.4	18.3, 19.9	Ever engaged in sexual intercourse: Male 15 years	Not applicable	Toward
5.4	18.3, 19.9	Ever engaged in sexual intercourse: Female 17 years	Not applicable	Away
5.4	18.3, 19.9	Ever engaged in sexual intercourse: Male 17 years	Not applicable	Toward
5.4a	18.3a,19.9a	Ever engaged in sexual intercourse: Black male 15 years	Not applicable	Toward
5.4b	18.3b,19.9b	Ever engaged in sexual intercourse: Black male 17 years	Not applicable	Toward
5.4c	18.3c,19.9c	Ever engaged in sexual intercourse: Black female 15-17 years	Not applicable	Toward
5.5	18.15,19.16	Abstinence from sexual intercourse for previous 3 months: Female 15–17 years	Not applicable	Toward
5.5	18.15,19.16	Abstinence from sexual intercourse for previous 3 months: Male 15–17 years	Not applicable	Toward
5.6		Contraception use: First intercourse, female 15–19 years	Not applicable	Toward
5.6		Contraception use: Recent intercourse, female 15–19 years	Not applicable	Away
5.6		Contraception use: Oral contraceptive and condom at most recent intercourse, female 15–19 years	Not applicable	Toward
5.6		Contraception use: First intercourse, male 15–19 years	Not applicable	Toward
5.6		Contraception use: Birth control pills and condoms at most recent intercourse, in school, male 15–17 years	Not applicable	Toward
5.6		Contraception use: Condom and pill use at last intercourse, male 17–19 years	Not applicable	Toward
5.8		Persons 13–18 years who have discussed sexuality with parents	Not applicable	Toward
5.10	14.12	Age-appropriate preconception counseling by clinicians: Inquiry about family planning, nurse practitioners	Not applicable	Away
5.10	14.12	Age-appropriate preconception counseling by clinicians: Counseling about family planning, nurse practitioners	Not applicable	Away

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
5.10	14.12	Age-appropriate preconception counseling by clinicians: Counseling about family planning, obstetricians/gynecologists	Not applicable	Met
5.12		Contraception use: Female 15–44 years	Not applicable	Toward
5.12c		Contraception use: Under 200% poverty, female 15–19 years	Narrowing	Toward
6.1a	7.2a	Suicide: 15–19 years	Not applicable	Toward
6.1b	7.2b	Suicide: Male 20–34 years	Widening	Toward
6.2	7.8	Suicide attempts:14–17 years	Not applicable	Away
6.2a	7.8a	Suicide attempts: Female 14–17 years	Not applicable	Away
6.3		Mental disorders: 18 years and under	Not applicable	Cannot assess
6.8		People 18 years and over seeking help with emotional/personal problems	Not applicable	Met
7.1b		Homicide: Spouse 15–34 years	Not applicable	Met
7.1c		Homicide: Black male 15–34 years	Widening	Toward
7.1d		Homicide: Hispanic male 15–34 years	Narrowing	Toward
7.1e		Homicide: Black female 15–34 years	Narrowing	Met
7.4		Child abuse and neglect	Not applicable	Away
7.4a		Child abuse and neglect: Physical abuse	Not applicable	Away
7.4b		Child abuse and neglect: Sexual abuse	Not applicable	Away
7.4c		Child abuse and neglect: Emotional abuse	Not applicable	Away
7.4d		Child abuse and neglect: Neglect	Not applicable	Away
7.7a		Rape and attempted rape: Female 12–34 years	Widening	Toward
7.9		Physical fighting: 14–17 years	Not applicable	Met
7.9a		Physical fighting: Non-Hispanic black male 14–17 years	Not applicable	Met
7.10		Weapon-carrying: 14–17 years	Not applicable	Met
7.10a		Weapon-carrying: Non-Hispanic black 14–17 years	Not applicable	Met
7.16		Conflict resolution in a required course: Middle/junior and senior high schools	Not applicable	Cannot assess
8.2		Completion of high school: 18–24 years	Not applicable	Away
8.2a		Completion of high school: Hispanic 18–24 years	Not applicable	Toward
8.2b		Completion of high school: Black 18–24 years	Not applicable	Away
8.4		Schools with comprehensive school health education: All eight criteria met	Not applicable	Cannot assess
8.5		Health promotion in postsecondary institutions: Higher education institutions	Not applicable	Cannot assess
8.9		Family discussion of health issues: 10 years and over	Not applicable	Away
8.9		Family discussion of health issues: Engaging in family discussion of HIV/AIDS, grades 9–12	Not applicable	Toward
8.10		States with community health programs addressing at least three Healthy People 2000 objectives	Not applicable	Cannot assess
8.13		Television partnerships with community organizations for health promotion	Not applicable	Met
9.3b		Motor vehicle crash deaths: 15–24 years	Narrowing	Toward
9.5b		Drowning deaths: Male 15–34 years	Narrowing	Toward
9.18		Injury prevention instruction in required course: Middle/junior and senior high schools	Not applicable	Met
9.19	13.16	Protective equipment: Baseball/softball, Mouth guard	Not applicable	Toward
9.19	13.16	Protective equipment: Baseball/softball, Headgear	Not applicable	Toward
9.19	13.16	Protective equipment: Football, Mouth guard	Not applicable	Toward
9.19	13.16	Protective equipment: Football, Headgear	Not applicable	Toward
9.19	13.16	Protective equipment: Soccer, Mouth guard	Not applicable	Toward
9.19	13.16	Protective equipment: Soccer, Headgear	Not applicable	Toward
10.2f		Nonfatal work-related injuries: 15–17 years	Not applicable	Toward

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
11.1b		Asthma hospitalizations: 14 years and under	Widening	Toward
13.1		Dental caries: 15 years	Not applicable	Toward
13.1d		Dental caries: American Indian/Alaska Native 15 years	Not applicable	Toward
13.2		Untreated dental caries: 15 years	Not applicable	Toward
13.2e		Untreated dental caries: Parents who have less than a high school education, 15 years	Not applicable	Toward
13.2f		Untreated dental caries: American Indian/Alaska Native 15 years	Not applicable	Toward
13.2g		Untreated dental caries: Black 15 years	Not applicable	Toward
13.2h		Untreated dental caries: Hispanic 15 years	Not applicable	Toward
13.8		Protective sealants: 14 years	Not applicable	Toward
13.8b		Protective sealants: Black 14 years	Not applicable	Toward
13.8d		Protective sealants: Hispanic 14 years	Not applicable	Toward
17.20		Service systems for children with or at risk of chronic and disabling conditions	Not applicable	Cannot assess
17.22	22.4	Identify gaps in health data	Not applicable	Toward
17.22	22.4	Establish mechanisms to meet data needs	Not applicable	Toward
18.1		AIDS incidence: 18 years and over	Not applicable	Met
18.1b		AIDS incidence: Black (non-Hispanic) 18 years and over	Not applicable	Met
18.1c		AIDS incidence: Hispanic 18 years and over	Not applicable	Met
18.1d		AIDS incidence: Female 18 years and over	Not applicable	Met
18.2		HIV prevalence: 13 years and over	Not applicable	Met
18.2c		HIV prevalence: Females 15–44 years giving birth to live-born infants	Not applicable	No change
18.4a	19.10a	Condom use at last sexual intercourse: Female 15–19 years	Not applicable	Toward
18.4b	19.10b	Condom use at last sexual intercourse: Male 15–19 years	Not applicable	Cannot assess
18.4d	19.10d	Condom use at last sexual intercourse: Black female 15–44 years	Not applicable	Toward
18.10	19.12	HIV and other STD education curricula: Schools offering at least one STD class	Not applicable	Met
18.10	19.12	HIV and other STD education curricula: Middle and senior high schools, HIV prevention in required courses	Not applicable	Cannot assess
18.10	19.12	HIV and other STD education curricula: Middle and senior high schools, STD prevention required courses	Not applicable	Cannot assess
18.11	19.17	HIV and STD education for students at colleges and universities: Given AIDS or HIV infection prevention information	Not applicable	Cannot assess
18.11	19.17	HIV and STD education for students at colleges and universities: Given STD prevention information	Not applicable	Cannot assess
18.11	19.17	HIV and STD education for students at colleges and universities: AIDS or HIV in a college class	Not applicable	Cannot assess
19.1b		Gonorrhea: 15–19 years	Widening	Toward
19.1c		Gonorrhea: Female 15–44 years	Not applicable	Toward
19.2		Chlamydia prevalence: Female 15–19 years	Not applicable	Toward
19.2		Chlamydia prevalence: Female 20–24 years	Not applicable	Met
19.3		Primary and secondary syphilis	Not applicable	Met
19.3a		Primary and secondary syphilis: Black	Not applicable	Met
19.4		Congenital syphilis in infants under 1 year	Not applicable	Met
19.4a		Congenital syphilis in infants under 1 year: Black	Not applicable	Met
19.4b		Congenital syphilis in infants under 1 year: Hispanic	Not applicable	Met

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
19.5		First time consultations: Genital herpes	Not applicable	Away
19.5		First time consultations: Genital warts	Not applicable	Met
19.6		Pelvic inflammatory disease hospitalizations: 15–44 years	Not applicable	Toward
19.6		Pelvic inflammatory disease initial visits to physicians	Not applicable	Met
19.6a		Pelvic inflammatory disease hospitalizations: Black 15–44 years	Not applicable	Toward
19.6b		Pelvic inflammatory disease hospitalizations: 15–19 years	Narrowing	Toward
19.7	20.3b, 20.3c	Sexually transmitted Hepatitis B	Not applicable	Met
19.8		Repeat gonorrhea infection	Not applicable	Toward
19.8a		Repeat gonorrhea infection: Black	Not applicable	Toward
20.1		Vaccine-preventable diseases: Diphtheria 25 years and under	Not applicable	Met
20.1		Vaccine-preventable diseases: Tetanus 25 years and under	Not applicable	Away
20.1		Vaccine-preventable diseases: Polio	Not applicable	Met
20.1		Vaccine-preventable diseases: Measles	Not applicable	Toward
20.1		Vaccine-preventable diseases: Rubella	Not applicable	Away
20.1		Vaccine-preventable diseases: Congenital Rubella Syndrome	Not applicable	No change
20.1		Vaccine-preventable diseases: Mumps	Not applicable	Met
20.1		Vaccine-preventable diseases: Pertussis	Not applicable	Away
20.11		Basic immunization series among children in kindergarten through postsecondary education institutions	Cannot assess	Met
21.3		Usual source of care: 18 years and over	Not applicable	Toward
21.3a		Usual source of care: Hispanic 18 years and over	Not applicable	Toward
21.3a		Usual source of care: Mexican American 18 years and over	Not applicable	Toward
21.3b		Usual source of care: Black 18 years and over	Not applicable	Toward
21.3c		Usual source of care: Low-income people 18 years and over	Not applicable	Toward
21.3d		Usual source of care: American Indian/Alaska Native 18 years and over	Not applicable	Toward
21.3e		Usual source of care: Asian/Pacific Islander 18 years and over	Not applicable	Toward
21.4		People without health care coverage: Under 65 years	Not applicable	Away
21.4a		People without health care coverage: American Indian/Alaska Native under 65 years	Not applicable	Away
21.4b		People without health care coverage: Hispanic under 65 years	Not applicable	Away
21.4b		People without health care coverage: Mexican American under 65 years	Not applicable	Away
21.4b		People without health care coverage: Puerto Rican under 65 years	Not applicable	Toward
21.4b		People without health care coverage: Cuban under 65 years	Not applicable	Away
21.4c		People without health care coverage: Black under 65 years	Not applicable	Toward
21.5		Clinical preventive services from Federal programs: Screening	Not applicable	Cannot assess
21.5		Clinical preventive services from Federal programs: Counseling	Not applicable	Cannot assess
21.5		Clinical preventive services from Federal programs: Immunizations	Not applicable	Cannot assess

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
21.6		Provision of recommended services, children: Hemoglobin/hematocrit, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Hemoglobin/hematocrit, Nurse practitioners	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Hemoglobin/hematocrit, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Eye exam, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Eye exam, Nurse practitioners	Not applicable	Away
21.6		Provision of recommended services, children: Eye exam, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Blood pressure, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Blood pressure, Nurse practitioners	Not applicable	Away
21.6		Provision of recommended services, children: Blood pressure, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Height and weight, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Height and weight, Nurse practitioners	Not applicable	Away
21.6		Provision of recommended services, children: Height and weight, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Diphtheria-tetanus-pertussis (DTP) vaccination, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: DTP vaccination, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, children: DTP vaccination, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Oral polio vaccination, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Oral polio vaccination, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, children: Oral polio vaccination, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Tetanus-diphtheria booster, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Tetanus-diphtheria booster, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, children: Tetanus-diphtheria booster, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Haemophilus influenzae type b (Hib) vaccination, Pediatricians	Not applicable	Cannot assess
21.6		Provision of recommended services, children: Hib vaccination, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, children: Hib vaccination, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Tetanus-diphtheria booster, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, adults 18 years and over: Tetanus-diphtheria booster, Obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Tetanus-diphtheria booster, Internists	Not applicable	Cannot assess

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and young adults—Con.		
21.6		Provision of recommended services, adults 18 years and over: Tetanus-diphtheria booster, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Blood pressure, Nurse practioners	Not applicable	Toward
21.6		Provision of recommended services, adults 18 years and over: Blood pressure, Obstetrician/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Blood pressure, Internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Blood pressure, Family physians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Cholesterol level, Nurse practitioners	Not applicable	Toward
21.6		Provision of recommended services, adults 18 years and over: Cholesterol level, Obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Cholesterol level, Internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Cholesterol level, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Breast exam, Nurse practitioners	Not applicable	Away
21.6		Provision of recommended services, adults 18 years and over: Breast exam, Obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Breast exam, Internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Breast exam, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Pap smear, Nurse practitioners	Not applicable	Away
21.6		Provision of recommended services, adults 18 years and over: Pap smear, Obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Pap smear, Internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Pap smear, Family physicians	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Mammogram, Nurse practitioners	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Mammogram, Obstetricians/gynecologists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Mammogram, Internists	Not applicable	Cannot assess
21.6		Provision of recommended services, adults 18 years and over: Mammogram, Family physicians	Not applicable	Cannot assess
21.7		Local health department assurance of access to essential clinical preventive services: Proportion of people served	Not applicable	Cannot assess
21.7		Local health department assurance of access to essential clinical preventive services: Assess services provided to the local population	Not applicable	Cannot assess
21.7		Local health department assurance of access to essential clinical preventive services: Collect data	Not applicable	Cannot assess
21.7		Local health department assurance of access to essential clinical preventive services: Evaluate whether a gap exists	Not applicable	Cannot assess

Table VII. Special population objectives included in *Healthy People 2000*—Con.

Objective Number	*Duplicate objective*	*Short objective text*	*Disparity assessment in relation to reference population**	*Objective status in relation to target*
		Adolescents and Young adults—Con.		
21.7		Local health department assurance of access to essential clinical preventive services: Provide	Not applicable	Cannot assess
22.2		Objectives with national data sources	Not applicable	Toward
22.2a		State level data for at least two-thirds of State objectives	Not applicable	Toward

* For method of calculation, see Appendix Technical Notes.

Special population objectives included in *Healthy People 2000*: Adolescents and Young adults

	Disparity Measure							
Objective status	*Eliminated*	*Narrowing gap*	*No change*	*Widening gap*	*Cannot assess*	*Disparity total*	*Not a disparity measure*	*Overall total*
Met	0	2	0	0	3	5	32	37
Toward	0	5	0	5	0	10	87	97
Mixed/No change	0	0	0	0	0	0	4	4
Away	0	0	0	0	1	1	42	43
Cannot assess	0	0	0	0	0	0	62	62
TOTAL	0	7	0	5	4	16	227	243